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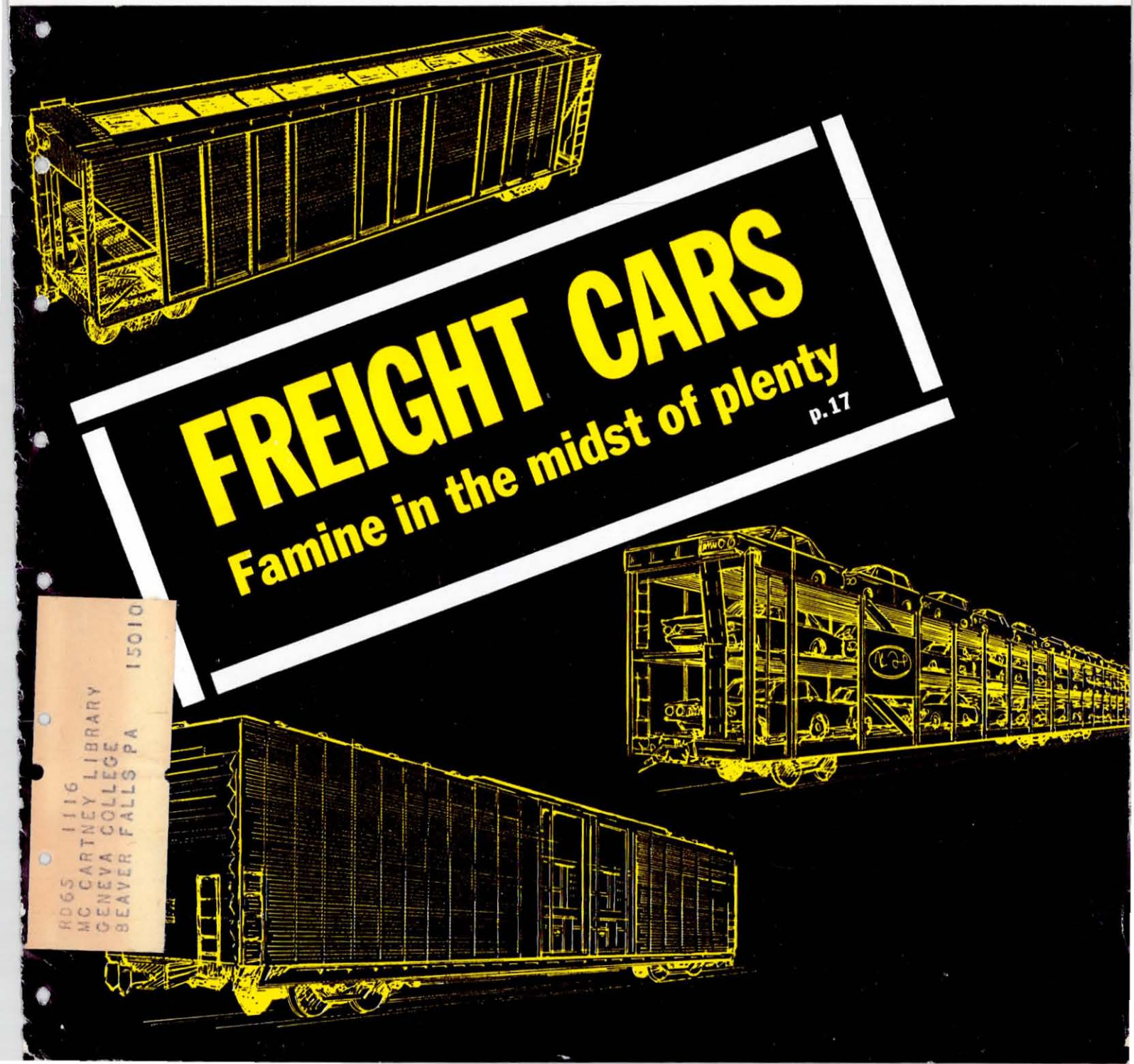
In car supply, the question isn't simply **How Many?**—but **How Big?** and **How Fast?** . . . . . p. 22

April 19, 1965

RAILWAY AGE WEEKLY



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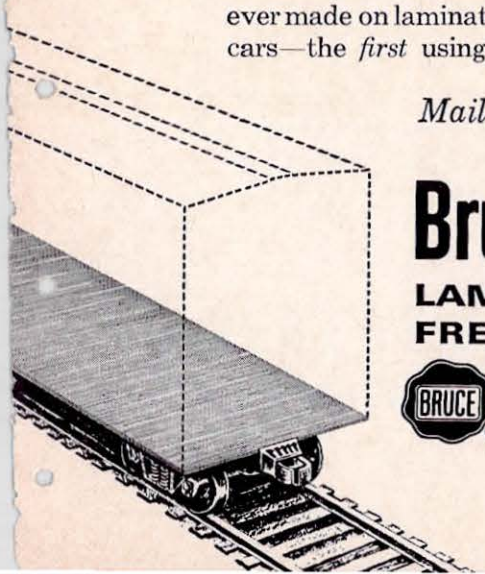

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April 19, 1965 • Vol. 158, No. 16

FREIGHT CARS

Famine in the midst of plenty
Buying and utilization go up, but shortages remain . **p.17**

Stress is on size, load handling
Some examples of modern freight equipment **p.22**

Super-train of the future?

A new train concept designed with the Northeast Corridor in mind combines today's technology, tomorrow's design .. **p.11**

Engineers see bigger role for unit trains

The future of railroad freight and passenger business was the big topic at a recent IEEE-ASME conference **p.26**

The Action Page—Is wage boom everlasting?

It would be self-deception for railroaders to believe that wages and "benefits" can be increased indefinitely **p.50**

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SHORT AND SIGNIFICANT

Buying of South Shore stock under ICC scrutiny

The ICC has instituted an investigation to determine whether violations of the Interstate Commerce Act have been involved in C&O and Monon purchases of stock of the Chicago South Shore & South Bend. Already pending at the Commission were the South Shore's complaint against alleged Monon buying, and C&O's application for authority to acquire control of South Shore. Meanwhile, C&O has announced that it has terminated its offer to buy stock control of the CSS&SB.

●

Study hits lack of local transport planning

Local leadership is not doing the job it should be doing in making decisions on transportation planning. This is one of the prime findings in a comprehensive report just released by the Committee for Economic Development. By the year 2000, the report forecasts, 74% of the U.S. population, or 255 million people, will live in 300 major metropolitan areas. "Major decisions about transportation cannot be put off. Yet today in metropolitan areas," the report states, "governments are often so fragmented that neither singly nor through combination have they developed agencies to take responsibility for transportation in the area as a whole. Decisions are frequently left to state and federal officials." The report suggests guidelines to help metropolitan areas understand current transportation problems and participate in sound planning for the future.

●

Record number of piggybacks going to market

With increasing regularity, weekly U.S. piggyback loadings are registering new highs. The new weekly record was set in the week ended April 3, when 20,730 cars were loaded, breaking the previous high of 20,342 recorded the week ending March 6. Loadings so far this year are out front of loadings for the corresponding period last year by more than 36,000 cars.

●

ICC lends an ear to NH problems...

ICC hearings on the New Haven's request to begin cutting commuter service this summer got off to a rousing start in New York last week. Several hundred placard-carrying New Haven riders marched from Grand Central Station to the Biltmore Hotel to attend the opening session. Commissioner William H. Tucker then listened to testimony from a parade of witnesses that included U.S. Senators, Congressmen, Governors and railroad trustees.

But to all the questions, still no answers

Proposals to end the bankrupt line's problems ranged all over the lot. One suggestion was to get all concerned parties in a hotel-room conference "and knock a few heads together." Connecticut Gov. John Dempsey took a more gentle approach, proposing that the four states served by the NH ante up $11.5 million to keep passenger service alive at least for another year. U.S. Senators from three of the states—New York, Connecticut and Rhode Island—advanced their own proposal: that operation of the New Haven's passenger service be made a condition of the Penn-Central merger. At week's end, solution to the NH's perplexing problems was nowhere in sight, and participants in the sessions seemed resigned to the fact that the hearing will be a long one.

MONDAY MORNING REPORT

Changes in the union shop?

Something may have happened to the union shop in the railroad industry. Something definitely has happened—but what it is may be either nothing or a matter of pretty general interest. Since the so-called Hanson case was decided by the U.S. Supreme Court a number of years ago, the union-shop provision of the Railway Labor Act has been generally considered unassailable. Now, though, there may be reasons for taking another look.

The courts rule—and reactions are varied

Two court cases have recently been settled in the South—and, while neither has much effect on anybody but the comparatively few people directly involved, there may be principles which could be applied in other situations. Both cases involved objections, by union members, to use of dues money for political purposes. And in both cases, the original plaintiffs—the individual members—have finally won at least moral victories. Perhaps the best gauge of effect, however, has been the reaction. In one case, someone identified only as "an AFL-CIO source" said the decision was not of the slightest importance—it was just that the unions involved didn't want to stand the expense of more court action in litigation affecting only eight people (and their dues). The railroad whose employees pressed the case—and the railroad wound up, believe it or not, as a co-defendant—has had no comment. And the National Right to Work Committee—an organization which, like the AFL-CIO, could hardly be regarded as absolutely disinterested—has hailed both dues cases as "landmarks . . . decided for the freedom of the individual worker."

Quit the union, keep the job

One of these cases involved employees of the Southern, the other employees of a Southern subsidiary. As the RTW committee sees it, "in both cases the worker plaintiffs were allowed to quit the union and retain their jobs although the brotherhoods [non-op unions] hold so-called 'union shop' contracts with the railroads which normally require union membership as a condition of employment. These cases not only set precedent for workers' rights regarding use of dues for political purposes, but they could be the base for a legal precedent establishing the right of the individual not to join the union unless the union discloses what portion of his dues is used for political purposes and refunds that portion if requested."

The burden was on the unions

In both cases, apparently, unions had the burden of proof put on them to show what part of dues went for political purposes—and in both instances, no accounting was made. Payments from the plaintiffs were waived. But the employment rights of the plaintiffs were specifically protected by the court.

Nothing drastic—just a point to ponder

These two cases came up in states with right-to-work laws—laws which are recognized effective under the Taft-Hartley Act but not under the Railway Labor Act. Their effect, broadly, may be small. But, at the very least, they may give the legal fraternity—carrier and union alike—a few revised angles to ponder.

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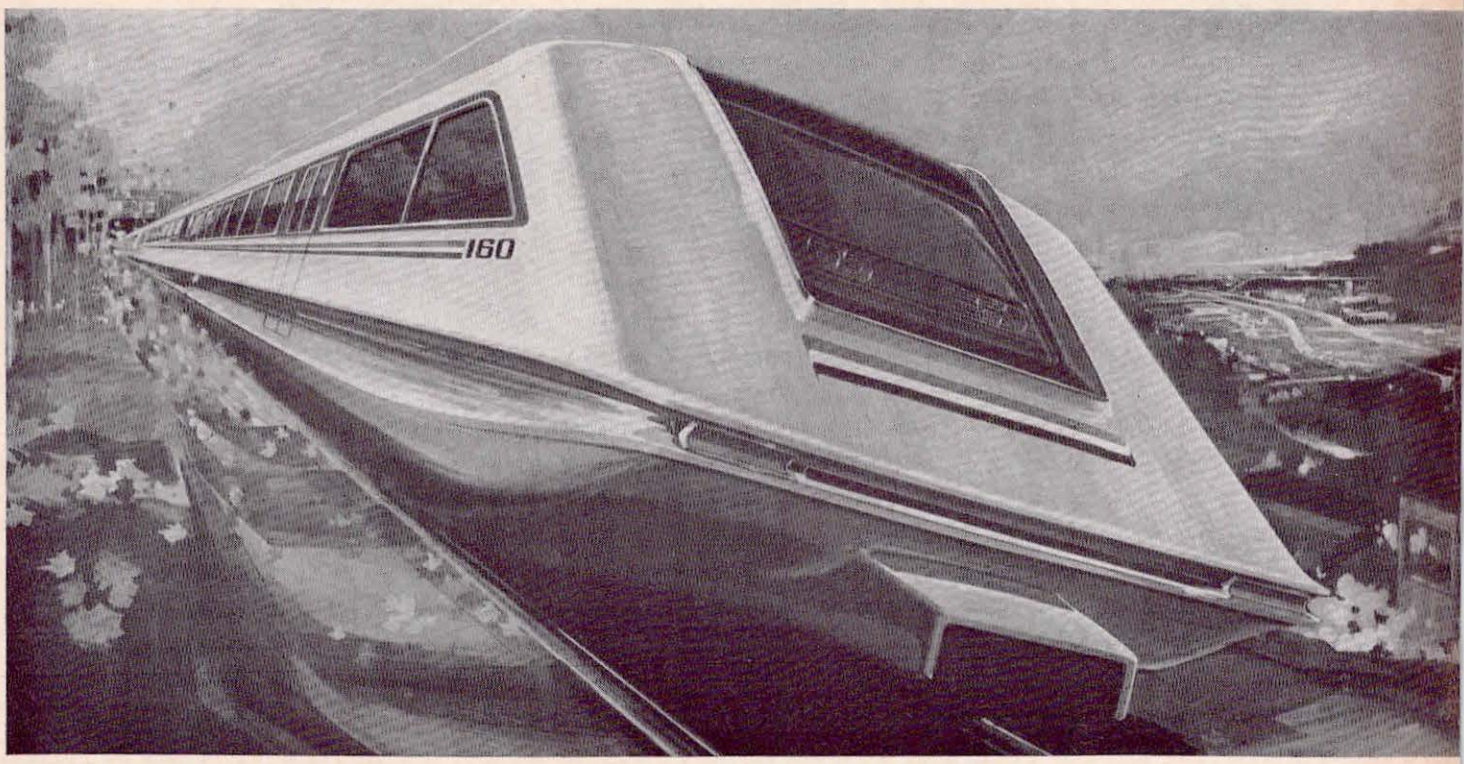

GSI-Sundberg Northeast Corridor train concept: "The day of the dull, dark transit car is gone."

Super-train of the future?

Today's technology—and tomorrow's design—are combined in a new train concept tailored for the Northeast Corridor. At 150 mph, it would be the world's fastest.

Proposals for the new high-speed transport that is contemplated for the Boston-Washington corridor have ranged far and wide. Some foresee trains flitting at prop-plane speeds through a supersubway. Others envision people-containers floating at dizzying speeds on cushions of air. Now, a more down-to-earth concept—combining proven duo-rail technology with a train-from-Mars look—has come from the drawing board of a leading car-design team.

"It may look like Buck Rogers," concedes W. Ashley Gray, Jr., president of General Steel Industries, which collaborated on the design, "but it's feasible."

• **That far-out look.** The concept calls for a conventionally powered electric m-u train capable of speeds up to 150 mph. For far-out appearance, as well as speed, it would put existing contenders in the train-of-tomorrow sweepstakes in the shade. (Two such contenders: Japan's bullet-nosed "Hikari," which clicks across the New Tokaido Line at 125 mph; and an equally fast, conventionally designed train that is reported ready to go into service between Augsburg and Munich in Germany.)

A product of GSI's St. Louis Car Division working with industrial designer Carl W. Sundberg, the new design-concept is the second specifically aimed at implementation of the so-called Pell Plan. The first proposed design—also sleek and futuristic—came from the Budd Co. (RA, Aug. 24, 1964, p. 33).

• **Why appearance matters.** Gray emphasizes that what GSI and Sundberg have come up with is, at present, only an idea. Its importance, as he sees it, is that it fills the need for "a dramatically new statement of modern rail technology for the Northeast Corridor train."

"Present technology can provide the 150-mph super-regional train President Johnson, Senator Pell and others are seeking for the Washington-New York-Boston run," says Gray. "But since the function of these trains will be new and different, appearance must reflect the radically new type of operation. . . . The day of the dull, dark transit car is gone."

GSI and Sundberg also collaborated on the design for the new PATH car (RA, March 15, p. 15), and have now come up with a car design for the Bay Area Rapid Transit District. GSI will deliver a full-scale, 75-foot mock-up to BARTD in June. ■

WATCHING WASHINGTON WITH WALTER TAFT

TAFT

• **THE ICC'S CHAIRMAN,** Commissioner Charles A. Webb, thinks transport regulation is worth what it costs in inefficiency. He thinks it should be sold on that basis—not by shrill warnings that deregulation would be catastrophic. This advice was given by Webb to the motor carrier industry in a recent address to the Western Highway Institute.

He discussed deregulation "as a possible future trend in the surface transportation industry." The deregulation he had in mind is not the same as simplification of regulation. And it does not mean narrowing the scope of regulation to achieve equality of opportunity among the various modes of surface transportation. What it does mean is ultimate withdrawal of all economic regulatory powers from the ICC and imposing upon the transportation industry only those restraints applicable to business generally.

ALL WITH A STAKE in the future of regulation should emphasize its advantages rather than the disadvantages of deregulation, the commissioner said. His own view is that, in a clear-choice situation, the public would prefer non-economic values of regulation to economies "which might be achieved by sacrifice of those values."

PROPONENTS OF DEREGULATION, generally, impress Webb as being articulate fellows with first-rate minds. He fears acceptance of their ideas by the public, unless the case for regulation is explained better in the future than it has been in the past.

REFUTATION of deregulation arguments coming from "respected economists" won't be accomplished by warnings about a return to the "law of the jungle," or by pointing to "horrors of cutthroat competition," Webb said. It is better, he advised, to sell regulation on its merits, and "to face the fact that massive deregulation, however undersirable, would not be catastrophic."

VIGOROUS DISSENT came promptly from the president of American Trucking Associations, John E. Amos. Speaking after Webb at the same meeting, Amos said he would choose the word catastrophic in its full and complete sense to describe the prospective aftermath of what Webb meant by massive deregulation. The ATA president went on to express confidence that this prediction of catastrophe would also be the prediction of every truck operator in the audience.

WEBB'S VIEW that the deregulation arguments of "respected economists" might be accepted by the public was also challenged by Amos. He does not share such fears because he feels sustained by his "confidence in the members of Congress." And he disposed of the "respected economists" by citing a recent statement by Secretary of Commerce John Connor who "expressed his less-than-monumental confidence in the brilliant thinkers who have never faced competition nor responsibility for the solvency and success of a business."

THE ATA PRESIDENT, meanwhile, is encouraged by Webb's advice that all with a stake in regulation should emphasize its advantages rather than the disadvantages of deregulation. Amos takes that to mean that the ICC chairman and his fellow commissioners "will be mounting the kind of intensive, widespread and positive program in favor of regulation which the chairman advocates."

Crew laws stay on NY books

New York State's full-crew laws, on the books since 1913, are likely to be around for a while longer. A State Supreme Court Justice last week dismissed a suit by 10 Eastern railroads to have the laws invalidated.

The carriers had contended that the laws are unconstitutional, and that they forced employment of 2,000 unneeded workers at a yearly cost of $13.4 million. Justice Gerald Nolan rejected the plea, declaring that although crew jobs had changed with advancing technology, the employees were still needed to ensure safety. Any changes in the standards of public safety, he found, should be ordered by the Legislature and not the courts.

• **Elation in the BLF&E.** The Brotherhood of Locomotive Firemen & Enginemen could hardly have been happier with the outcome. For one thing, the New York decision snapped a long string of reversals for the unions, as crew law after crew law has been invalidated by voter, legislative or court action. For another, the ruling provided the BLF&E with an opportunity to administer a spanking of sorts to two unions which dropped out of the New York fight—the Brotherhood of Locomotive Engineers and the Brotherhood of Railroad Trainmen.

BLF&E President H. E. Gilbert called the New York case "a significant victory in the long dispute over railroad crew sizes. It is of specific importance that the court's principal finding was that the services performed by locomotive helpers (firemen) have a direct relationship to safety, and that the presence of helpers (firemen) contributes to the safety of the operations in which they are engaged. . . . The precedent-setting decision is even more meaningful when you consider that the railroads spent weeks trying to convince the court that the helpers (firemen) and other employees are unnecessary."

Railroads involved in the case are the New York Central, Erie Lackawanna, Pennsylvania, Long Island, B&O, New Haven, Lehigh Valley, B&M, D&H, and Nickel Plate. The railroads are studying the decision to decide on an appeal. ■

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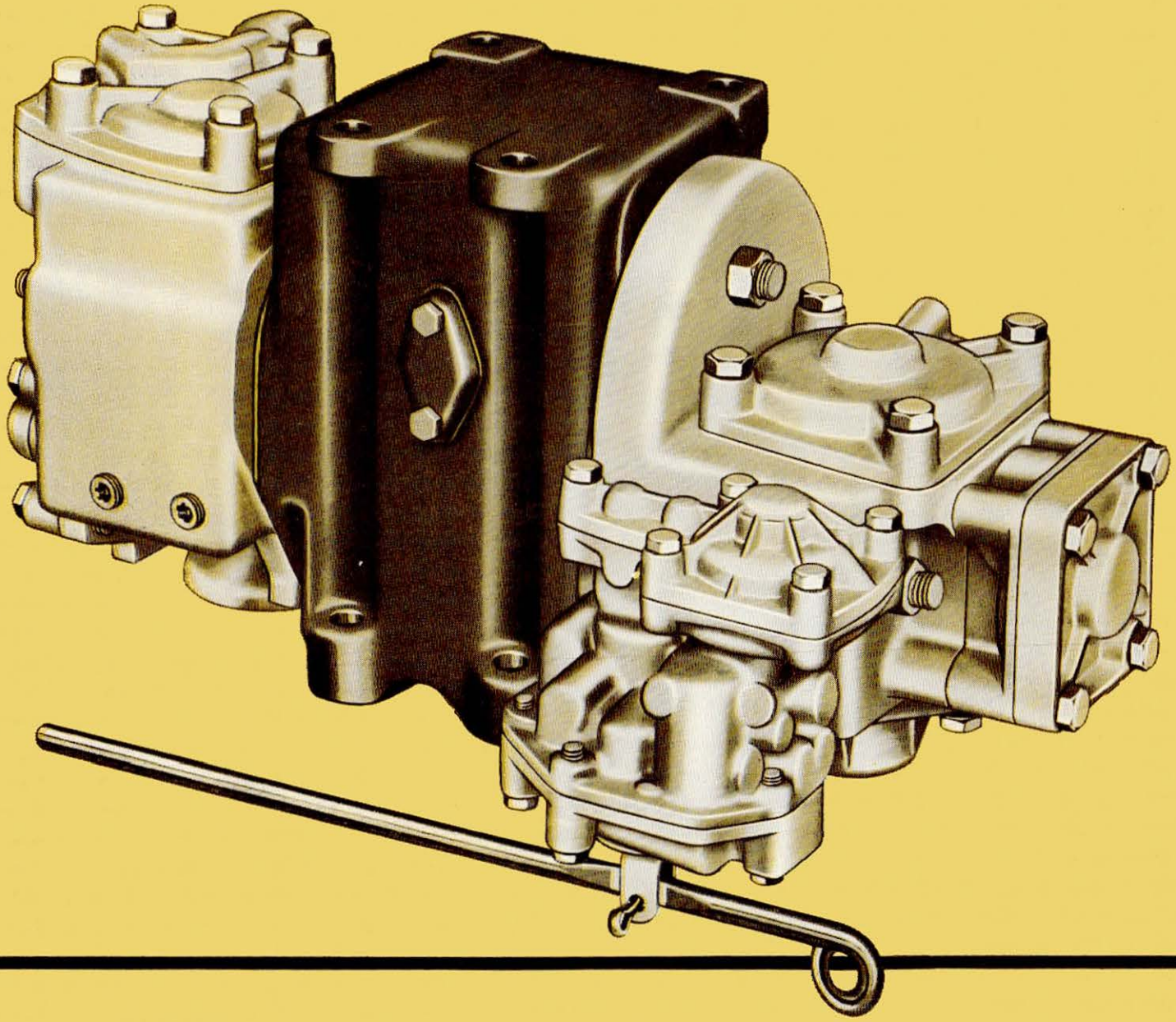

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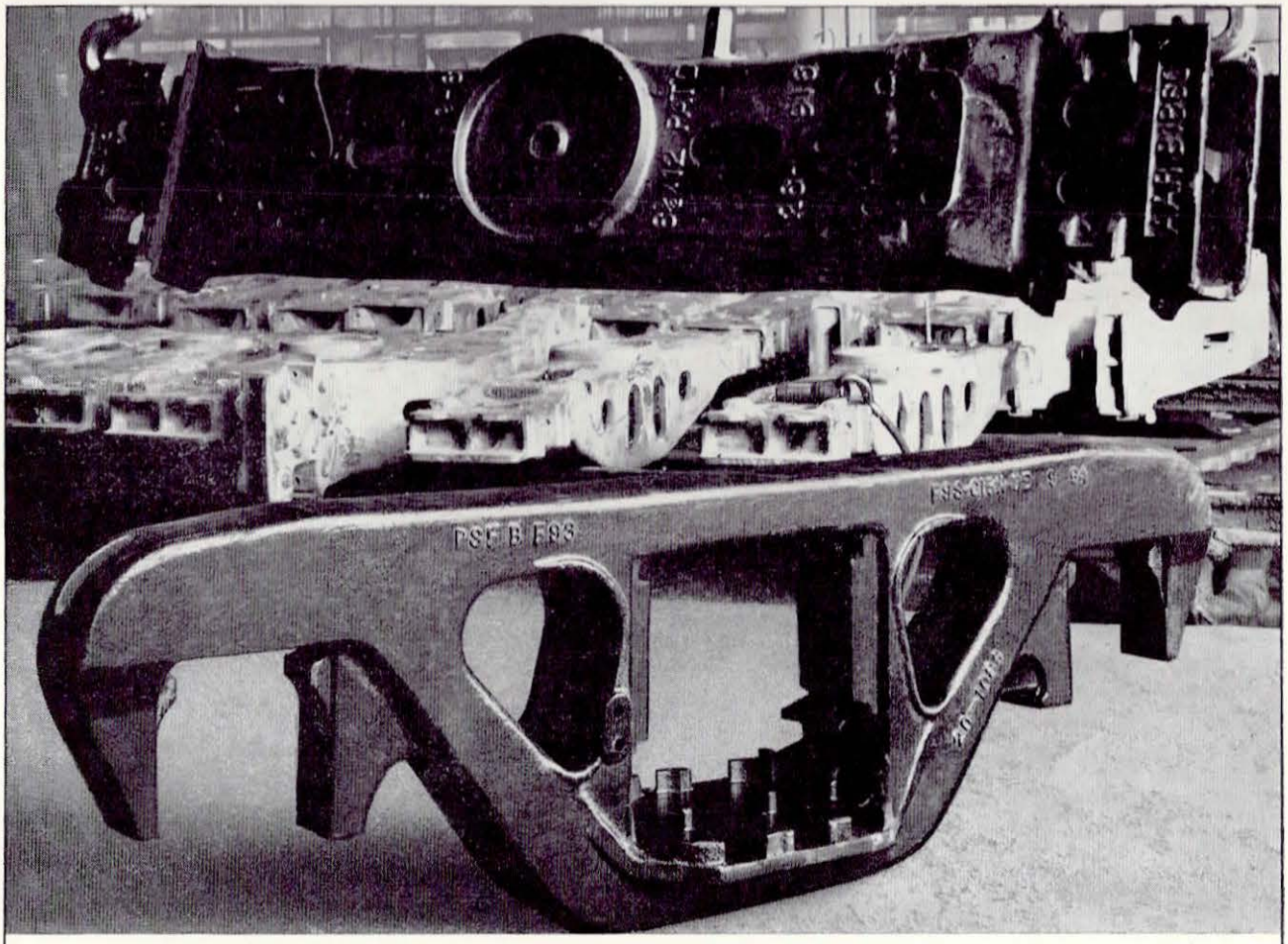

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A RAILWAY AGE SPECIAL REPORT

FREIGHT CARS

Famine in the midst of plenty

Railroaders agree that car supply, despite heavy purchases and increased utilization, remains a problem. There is disagreement about how to solve the problem. One proposed solution: higher per-diem rates. Another view says the root of the problem lies in traffic imbalances.

It doesn't help a shipper much, as Eldon Martin observes, to tell him that the car he can't get is a bigger one.

That's perhaps the big paradox in today's freight-car situation. Railroads are spending at close-to-record levels for new equipment. Per-car capacity keeps going up. Last year, for the first time since 1957, the hauling capacity of the entire car fleet went up. The magic of the computer is being harnessed to help improve car utilization.

● **All this, and yet. . .** And still shippers—coast to coast—complain, sometimes bitterly, of car shortages that are coming with greater frequency and hurting worse. Railroad men agree that car supply is still a problem. What they don't agree on, among themselves, is how to solve it and who should do it.

Eldon Martin is Burlington's vice president and general counsel. He has been, and is, the champion of higher per-diem rates—set by the ICC—as a way of building up the industry's car fleet. On the other side is David E. Smucker, Pennsylvania's vice president-operations, who regards traffic imbalances between regions as the root of the trouble—and who regards a further per-diem hike as merely a means to enrich the rich and impoverish the poor.

● **Round 3 under way.** Little more than a week ago in Washington, these two put on the gloves for Round 3 of the battle to get legislation clarifying the ICC's position and authority in the area of per-diem regulation. Martin and the roads he represents have won the first two rounds on points—the Senate Commerce Committee twice has reported an incentive per-diem bill favorably. But the measures never got to floor action, and so Round 3 (of what western roads, generally, hope won't develop into a 10- or 15-rounder) is under way.

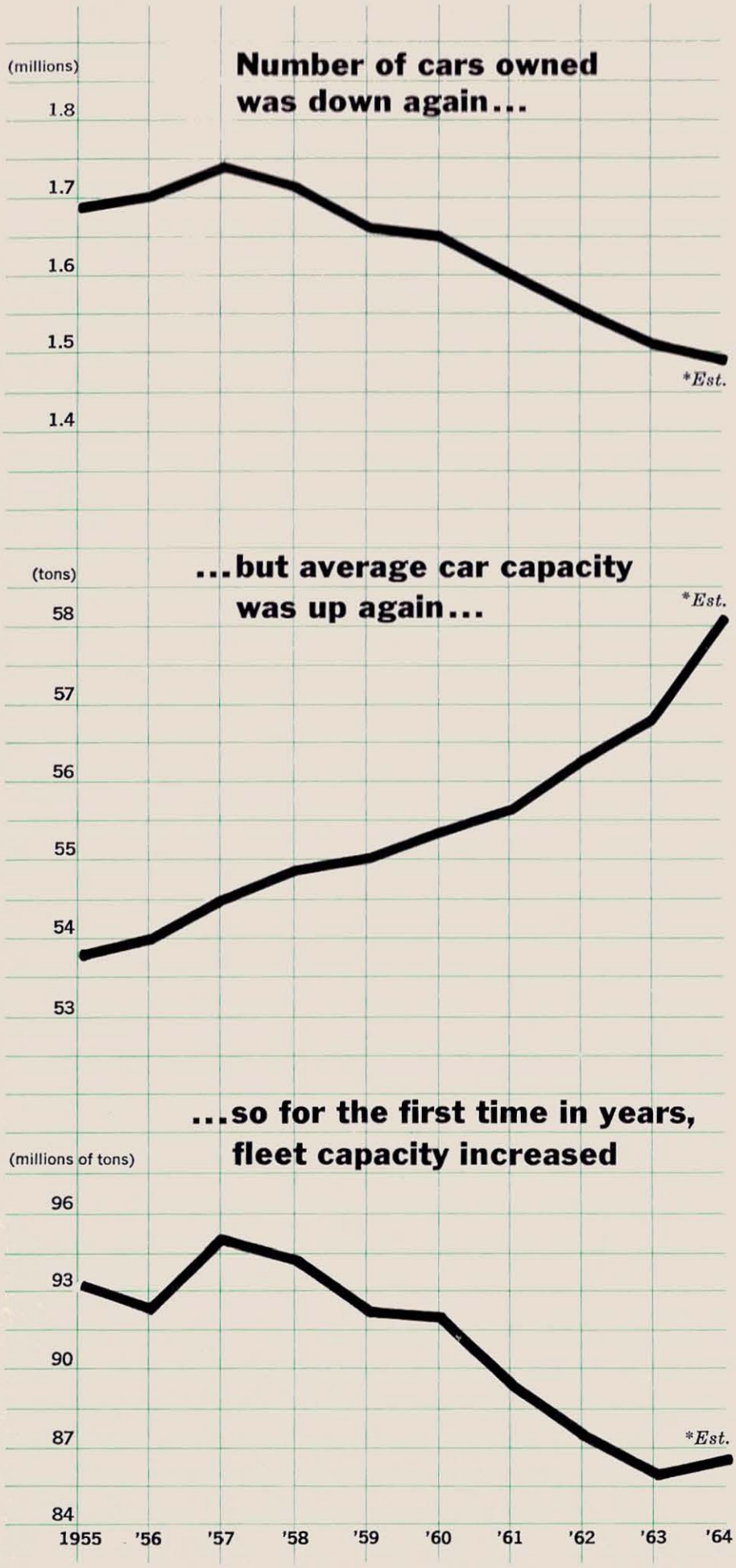
Burlington's general counsel is talking on behalf of 23 roads which own about 40% of the freight-car fleet, Pennsylvania's VPO speaks for 20 roads owning 30% of the fleet (and New Haven and Boston & Maine are opposing the bill separately). In the main, the pro-con split is East-West—but the group favoring incentive per-diem legislation includes Chesapeake & Ohio, Baltimore & Ohio, Louisville & Nashville, Illinois Central, Western Maryland, Southern and Gulf, Mobile & Ohio; and the anti- group numbers among its members Florida East Coast, Seaboard Air Line, Monon and Norfolk & Western.

● **The uncommitted.** In the middle—more or less—are roads with the remaining 30% of fleet ownership. And it's a healthy balance of power—including such lines as Union Pacific, Southern Pacific, Milwaukee, Rock Island, Chicago & North Western, Missouri Pacific and Atlantic Coast Line.

Roads favoring the per-diem bill—it's S.1098—are hopeful this year for two reasons. They've made their case successfully twice, so far as the Senate committee is concerned, and the problem is one that's coming to be well known. Second, they're getting an early hearing this time, and the timing reduces the chance of a favorable report being lost in a closing Congressional rush.

As usual, arguments on both sides have the persuasive ring.

● **Why favor S.1098?** With Burlington's Martin as their spokesman, roads favoring S.1098 contend that per-diem charges "are an important factor in car supply and distribution, during car shortages and otherwise. . . . The basic objective is to get more freight cars. We don't have enough because we have actually discouraged the acquisition or



construction of new cars. The solution lies in the substitution of an incentive which will make car ownership more attractive."

Despite heavy expenditures for equipment in recent years, Martin points out, total freight-car ownership has declined by more than 15% in 20 years. But, he argues, the real problem concerns general-purpose equipment—and ownership of plain box cars has dropped more than 26% during the same period.

Even last year, when new-car deliveries hit a seven-year high, box-car retirements exceeded installations by a 2-to-1 margin. In the West, where grain and lumber loadings are big factors in rail revenues, the problem is most serious. But, as top officers of the regional shippers advisory boards note, no area is blessed with a fully adequate supply of general-service equipment.

● **Rent or own?** As Burlington's general counsel sees it, the reason for the decline in the car fleet isn't hard to find: "One who must use a particular article in his business will either own it or rent it from others, in the light of his own selfish interests. Other factors being equal, he will rent rather than own if the rented article will serve his purpose and cost him less in the long run. This is particularly true if the article comes into his possession fortuitously, without effort or negotiation, and he is lawfully permitted to use it by payment of a rental which is below its value to him or to the owner. . . . This obvious principle explains the existence of our depleted inventory of freight cars, as well as the misuse and maldistribution of those now in service."

Current per-diem rates, Martin contends, "do not cover the full costs and risks of ownership, to say nothing of profit. Generally, they are below the amount which a car owner could earn daily by the use of the car on his own railroad, when a shortage exists. . . . This policy discourages the construction of new cars and places a premium upon inadequate car ownership. Just so long as it is cheaper to rent a car than it is to buy or build one, underbuilding will be the policy of strategically situated railroads and construction will be held to minimum requirements."

● **Needed: 'Reliable assurance.'** And his conclusion: "The prospective purchaser of freight cars wants and needs reliable assurance that per-diem charges will be fixed sufficiently high for car ownership to be a profitable and desirable form of investment."

PRR Vice President Smucker, speaking—for the most part—for eastern roads, can't agree. He cites traffic patterns and the AAR car-service rules

and economic principle—and points out that most of the roads he's talking for "have greater problems ridding their lines and their stations of surplus empty cars than they do of finding suitable empty cars for application to the loading requirements of their patrons. This is particularly true of the more common types [of equipment] in which ordinary, plain box cars predominate."

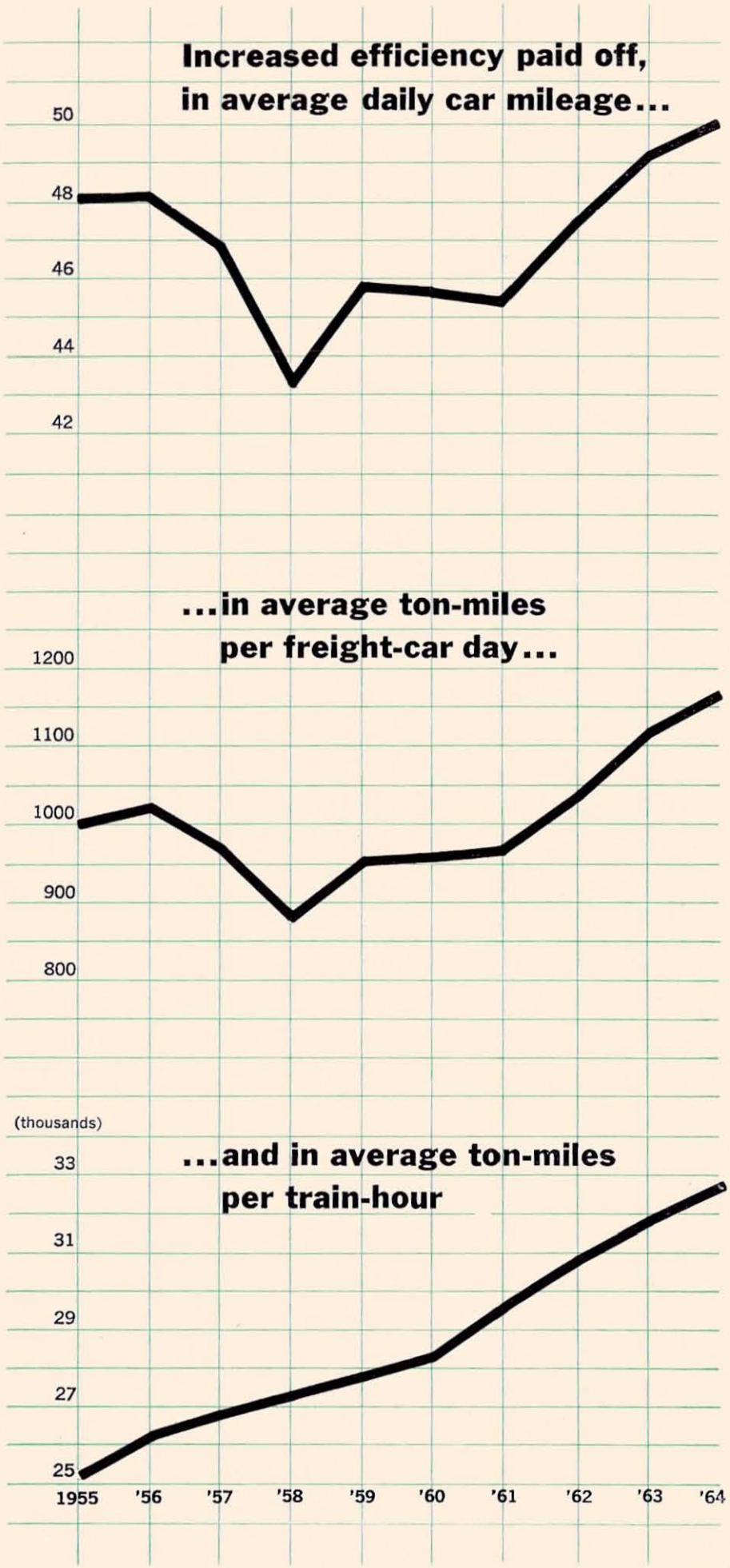
Smucker also notes that a railroad "is obligated to accept in interchange carload freight loaded in any suitable car, to move it to destination, place it for unloading and then remove and dispose of the empty car. There is no escape from payment of car rental to the owner, nor should there be. Yet—the railroad which pays the per diem became liable for such payments simply through the natural operation of interline freight movement."

● **The 'have-not' problem.** From a dollar-and-cent standpoint, PRR's vice president is representing the have-nots. In 1963, he told the Senate Commerce Committee's freight-car shortage subcommittee, roads favoring an incentive per-diem bill were on the per-diem credit side by $33.8 million—while roads opposing paid out $32 million more than they could collect. And last year, he testified, the group backing such legislation had a composite rate of return on investment of 3.86%—compared with a 2.71% rate for the opponents.

That, Smucker declares, "is the economic picture—a group of relatively prosperous railroads, which generally would stand to profit from this legislation, opposed by a group of railroads, many of which are presently in financial difficulty and which would be further burdened by its enactment. . . . Enactment of the bill would merely trade dollars within the railroad industry—enrich the rich and further impoverish the poor."

● **Objective is OK.** Smucker doesn't quarrel with the "adequate-car-supply" objective of the legislation. But, he says, the industry has already taken "more effective steps toward achievement of the objective"—through the multi-level per-diem schedule which became effective Jan. 1, 1964, and modifications since then (including the three additional classes created April 1, which boost top daily payment to $12.18 for cars costing $35,001 and up).

The multi-level per-diem rates, Smucker says, "already guarantee a car owner depreciation and a 6% return, not on his original cost but on the reproduction value of his property. . . . What the proponents [of S.1098] obviously want are car-hire rates based on something more than the



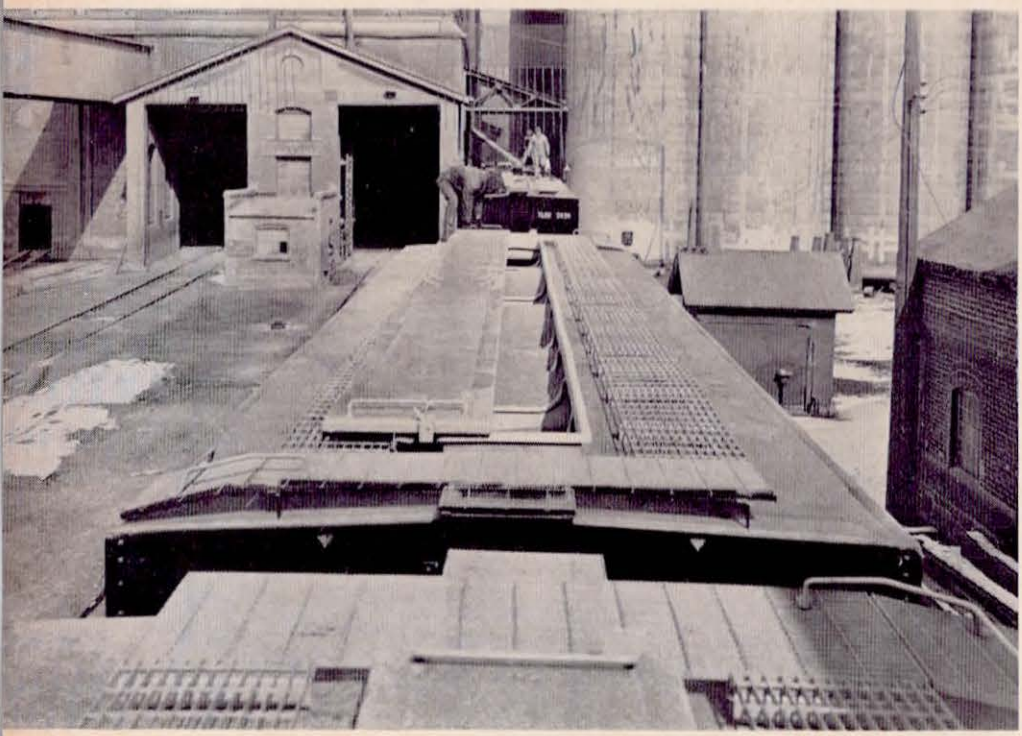
costs of ownership. Unless a railroad is more interested in becoming a lessor of property than it is in fulfilling its common-carrier responsibility, I submit that the multi-level per-diem arrangements, imperfect as they are from the point of view of the user, give railroads adequate incentive for investment in whatever supply of freight cars are needed to satisfy the requirement of that road's shippers."

● **Field inquiry coming up.** So the debate goes on—and on it will go this week, as the Senate subcommittee holds field hearings in Denver, Omaha and Kansas City April 21, 22 and 23.

Meanwhile, what's the story from individual railroads and shipper groups?

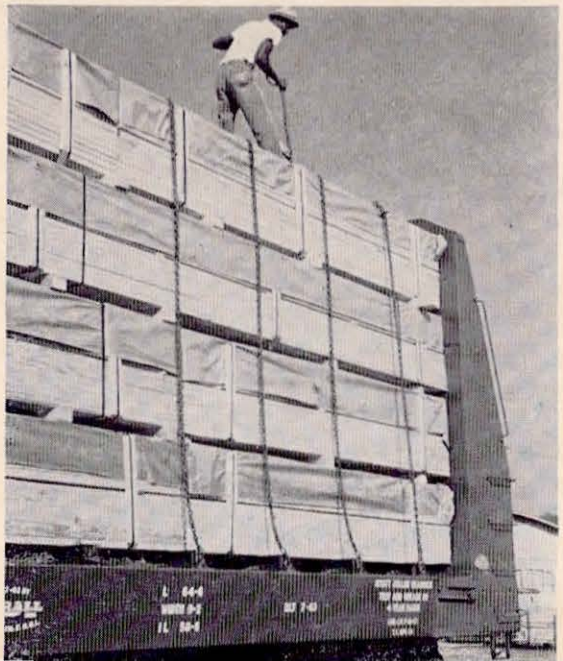
In the West, particularly the Northwest, things are not good. Great Northern, for example, sees little or no evidence that stepped-up car-acquisition programs, "including our own, have helped us. . . . As of April 1, we had less than 60% of our car ownership on line, in addition to a great many unhappy customers."

Up to April 1, GN had been getting some cars as a result of an AAR order —"but the effect on car supply has not been appreciable. However, on April 1, the ICC issued an order providing 300 box cars a week for us, and it has been our experience that we can expect effective help only from the Commission. For 44% of the time between Jan. 1, 1964, and the present, GN has had less than 75% of its ownership on line. We need a minimum of 85% to meet normal requirements, and when we have less than 70% we feel that GN is being required to provide an unreasonable proportion of cars for the country's rail traffic load."



SPECIALIZED CARS

The percentage of rail equipment classed as specialized continues to climb, as railroads (and, in some cases, shippers) invest in such types as these—bulkhead flats equipped with chain tiedowns, covered hoppers fitted with full-length loading hatches.



● **Bad now, worse later?** Shortages? They're there now—running to 700 cars per day—and the harvest of the '65 grain crop is yet to come.

Measurements of performance indicate that car utilization is improving steadily. But this may not be enough. GN puts it this way: "We classify box cars as to length and door size, and this enables us to quickly evaluate the usefulness of empties for many types of loading requirements. Empty box cars received are easily recognized as to type. They're given specific on-line destinations and are handled like equipment under load—these cars cannot be taken from trains other than at stations for which they're destined. We believe that our efforts have resulted in greater car efficiency—but there is no substitute for having a reasonably high percentage of our ownership available at all times."

● **Meanwhile, in the East:** As might be expected, a somewhat different view prevails in the East. New York Central, for example, thinks that car-acquisition programs—its own and others'—have improved car-supply capability. Further, NYC says, its expanding utilization activity "has significantly strengthened the railroad's car-supply position."

One prime measure of efficiency which NYC uses is foreign-car-days-on-line—and in 1964, the road showed 750,000 fewer foreign-car-days-on line than in '63.

One of Central's car-control programs involves equipment in particularly heavy demand. Each week, the manager-freight car distribution prepares a listing of such equipment, which is filed with NYC's Transportation Computer Center in New York. With this list—and with its constant record of cars throughout the system—the Center turns out a report on all cars of the type or types required. Via Data Central, the report then goes out to supervisory personnel and car-distribution forces. Is the system working? NYC casts a firm affirmative: "Railroad personnel can now handle both local and system orders for equipment in heavy demand more efficiently than ever before."

● **More with less.** Two other programs are also helping the road to do more with less equipment. One is essentially a coordination job, in which the central car-distribution office works with NYC's five operating districts to arrange for fast transfer of needed empties between districts. The second project grew out of a localized study of open-top hopper car movement. Patterns were established, controls were designed, a new hopper-car reporting form was developed. Since the new form was completed about a year ago, it's been installed in six of NYC's

TWO SOLUTIONS TO ONE PROBLEM

Two approaches to the car-supply, car-shortage problem so far as grain loadings are concerned—box-car rebuilding and the increasing use of covered-hopper equipment. The Santa Fe cars, 50-foot units rebuilt at Cleburne, Tex., company shops, are equipped with plug doors and grain inspection doors through which cars are loaded. The Great Northern covered hoppers—representing a type in use on a growing number of roads, including also Santa Fe—cost more than $15,000 apiece. But they'll haul about double the load of a standard 40-foot box car.

seven coal-and-ore regions—and it's paying off. Use of the system, coupled with expanded unit-train operations and acquisition of higher-capacity equipment, enabled NYC to rack up impressive utilization gains: From March 1964 to March 1965, Central handled 4.4% heavier loadings than in the preceding 12-month period—and did it with 11% fewer cars.

● **A long way to go?** Despite the almost-universal improvement in car-handling techniques, however, it seems pretty clear that the ultimate—in equipment supply and in equipment utilization—is still a long way off. Railroad men, generally, agree on this—and shippers are even more vocal in their views.

A Railway Age survey of top officers of the 13 regional shippers advisory boards produced a number of opinions that came close to being unanimous. Among the points which the shipper-board general chairmen make:

—Railroads deserve full credit for the tremendous car-acquisition programs undertaken in 1964 and '65. But the total fleet is still shrinking, and the only net gains are being registered in specialized equipment. Ownership of plain box cars, open-top hoppers and gondolas continues to slide.

—Types of equipment in shortest supply are exactly those which are not being bought or built in sufficient quantity to offset retirements. Shippers are well aware of the railroads' need for piggyback flats, high-capacity covered hoppers, high-capacity special-service box cars equipped with the most efficient damage-prevention devices. But as one observer puts it (in, perhaps, a somewhat dreamy mood), "what this country really needs may not be a good five-cent cigar—but a good $7,500 box car."

—Recent changes in per-diem and demurrage schedules haven't had any particular effect yet, but they probably will later.

—About the only point on which shipper-board officers differ is the impact on car supply of certain shipper practices such as over-ordering and delaying loading and unloading. Some say these factors are over-rated and have a minimal effect, others take a harsher attitude. As one board officer phrases it, "detention of equipment by consignees who use railroad cars for short storage is contributing mightily to the serious box-car shortage. The new demurrage schedules have probably caused some consignees to lease additional storage space, but I don't feel that the effect has been nearly great enough in this area."

● **Remaining: One big problem.** All this comment— from railroads and from shippers—is at once easy and hard to assess. Railroads spent $1.44 billion on capital expenditures last year and may top $1.6 billion in '65. Most of this goes for freight cars—close to 70,000 were installed in '64, and orders may climb to 75,000 units this year. Shippers are well aware of this. They know more cars are coming—and that the quality of the equipment, both from contract carbuilders and from railroad shops, is steadily going up. Their main worry is the de-emphasis of the ordinary, garden-variety car. And that's a puzzle that railroads generally, $1.6-billion expenditure or no, may have to grapple with—and soon.

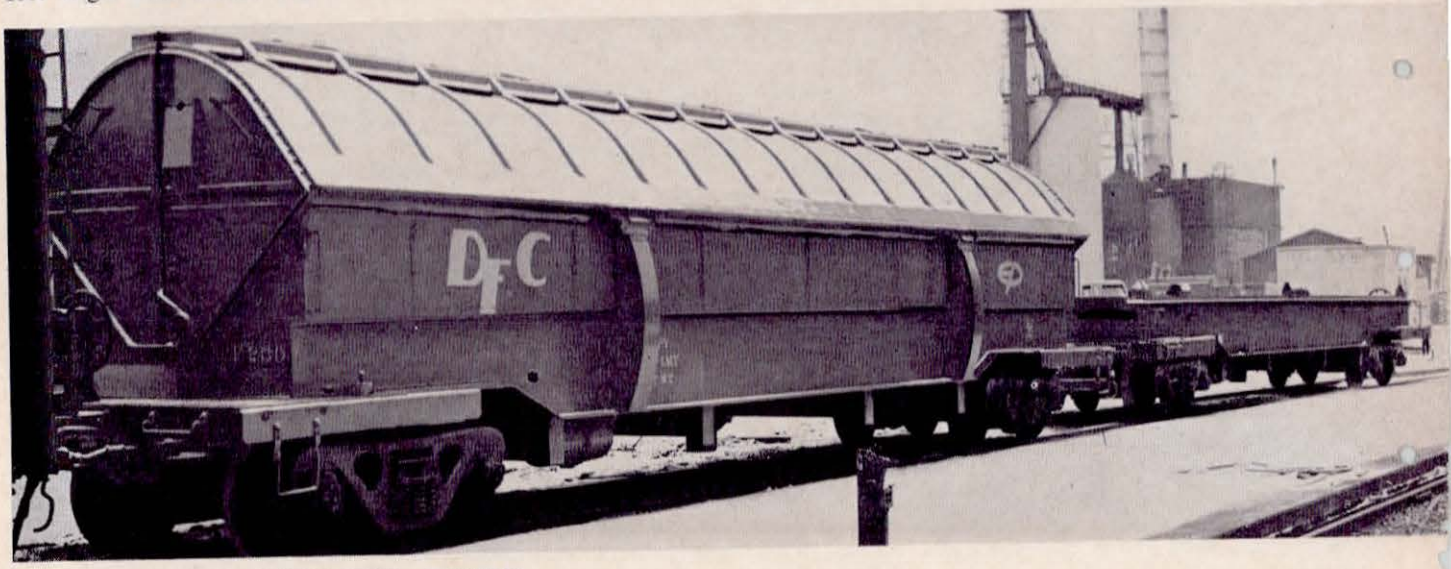
THE CHANGING FREIGHT-CAR FLEET, 1962-64

Type	Dec. 31, 1962	1964 (Est.)
BOX—GENERAL SERVICE	**577,106**	**510,600**
BOX—SPECIAL SERVICE	**62,354**	**87,500**
Flat	49,979	51,800
Stock	26,567	22,400
Gondola	249,080	223,300
Open-top hopper	440,368	431,400
Covered hopper	69,378	81,100
Refrigerator	29,457	38,000
Rack	37,697	38,200
Tank	5,608	5,100
Other	2,473	2,500

Freight cars—some modern designs ►

'BIG JOHN'—STILL BIGGER

Super "Big John" aluminum covered hoppers are rolling off production lines at Fruehauf's Magor Railcar Division. The 5,325-cubic-foot car has a light weight of 55,800 pounds and can carry 115-ton lading. New version is about 300 cubic feet larger than earlier Big John cars on which Southern's grain case is based.



COIL CAR HAS INTEGRAL COVER

Experimental coil steel car with Hydra-Cushion under-frame and integral covers has been built at new Evans Products plant. Low silhouette cover, attached at car's side sills, is designed to simplify loading and unloading of car when fully opened. Clearance problems associated with earlier covers are eliminated.

FAST UNLOADING IMPORTANT

Illinois Power generating plant at Wood River, Ill., is receiving its fuel in a unit train made up of 80 100-ton, 4,000-cubic-foot hopper cars built by Ortner Freight Car. Builder's rapid-discharge automatic door arrangement makes it possible to empty car's entire contents in 30 seconds or less—important in assuring rapid turnaround.

FREIGHT-CAR SUPPLY

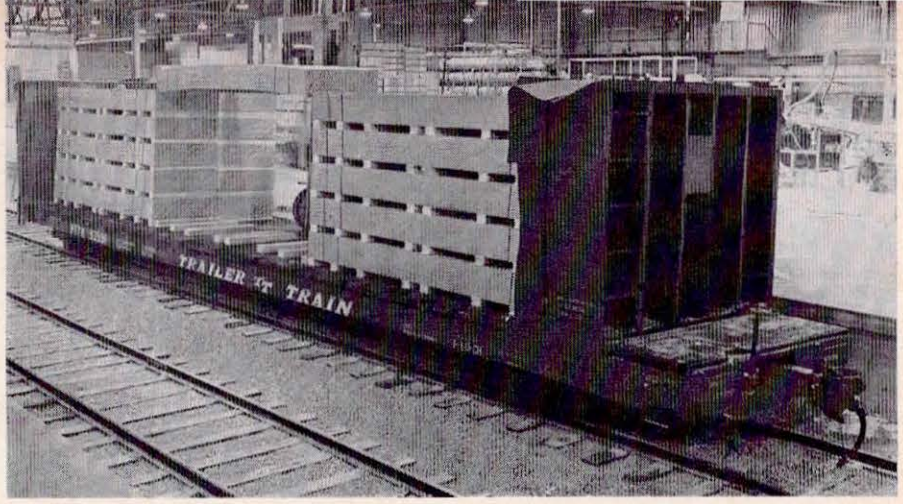
Stress is on size, load handling

New criteria must be used to appraise the capabilities of today's freight-car fleet. Once, the only question was 'How many cars are there?' Now there are at least two big questions: 'How big are the cars?' and 'How fast do the cars go?' Here are some samples of what railroads and suppliers are offering shippers.

It is no longer the same old numbers game . . . and it is today's freight cars that are changing it. In 1965, as never before, car supply is inadequately stated if it is expressed only as the traditional "how many cars." Other factors—"how big" and "how fast"—have almost equal roles in expressing the ability of railroad cars to move the nation's freight.

The latest freight car can do a transportation job vastly superior to that done by its predecessor of twenty—or even five—years ago. Size is the most significant change. The large percentage of high-capacity cars delivered last year, the American Railway Car Institute reported recently, enabled the railroad industry to boost its average freight-car capacity from 56.94 tons in 1963 to 58.18 tons in 1964. Five years ago, the figure was 55.49 tons.

● **Trend to 'giantism.'** The coming decade, F. J. Schroeder, ARCI board chairman, predicted recently to a Chicago Suppliers' group, will see the car fleet growing, not in numbers, but in capacity. There is, he said, a trend to



VERSATILE FLAT CAR

Bulkhead-equipped car simplifies wallboard transportation. Versatile 60-foot TTX flats of same general design are also fitted to move automobile frames and farm machinery. Pullman-Standard car can be converted from one service to another.

'BUILDING-BLOCK' BOX CAR

Eight basic structural components of American Car & Foundry "Precision Design" box car are combined on "building-block" principle to produce models of various sizes and load ratings. Material grades are chosen to reduce dead weight.

HIGH CAPACITY FOR WET ROCK

Phosphate rock moves from mine to processing plant in 403 of these 100-ton ACL hoppers built by Bethlehem Steel. The cars, first of such high capacity for this service, have interiors rendered corrosion resistant with du Pont Hypalon lining.

BIG TANK FOR GROWING TRAFFIC

Utilizing 125-ton trucks and high-strength alloy steels, Union Tank turned out 31,300-gallon cars for vinyl chloride, production of which rose 400% in past decade.

TROUGH HATCH: EASIER LOADING

The 44-foot roof opening and oversize discharge gates were incorporated in 4,500-cubic-foot car by General American to suit needs of today's grain shippers.

giantism in the building of new cars.

"Ten years ago the average price of a freight car was about $7,500," he explained. "Today, this figure has doubled . . . Today's 65,000 units represent the equivalent of 130,000 of the 1955 cars. So, just as the carloadings index has become less and less valuable as a measure of the railroad business, unit deliveries of new cars can be misleading unless they are qualified by the dollar value of the units."

● **A warehouse no longer.** "Discarding the historic view of the freight car as a slow-moving warehouse on wheels," Schroeder added, "the carbuilders by spending heavily on research and development have emphasized the materials-handling concept. In this we have been encouraged by the railroads which are interested primarily in profitable freight-car design, in rolling-stock utilization, and in equipment tailored to the needs of their shippers."

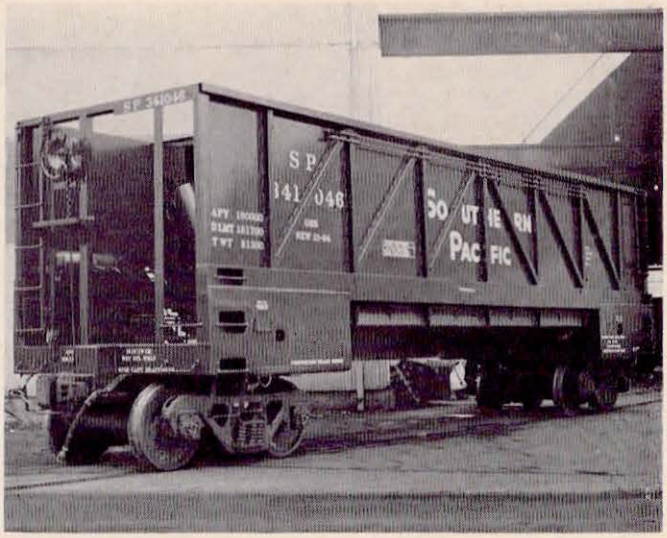
The railroads' future as a growth industry is assured, Schroeder concluded, "if the supply industry and the railroads continue to search for better and lower-cost ways to service the customers."

That materials-handling concepts are emphasized in today's designs is evident from the features of the recently built cars shown herewith. Simplified loading and unloading arrangements can be directly translated into greater availability. Improved structural features enable these cars to be handled faster and with greater reliability.

● **Greater capacity to come.** The widespread introduction of four-axle, 100-ton cars has been primarily responsible for the over-all increase in average per-car capacity over the past three years. And there is about to be another jump. Many four-axle, 125-ton cars were placed in service last year and still more will be on the rails this year. Simultaneously, there is interest in the potential for the six-wheel truck like that used under the 135-ton Atlantic Coast Line "Whopper Hopper" built in 1964 (RA, Sept. 14, 1964, p. 22). The Pennsylvania just announced its plans for acquiring this year two 150-ton tank cars fitted with six-wheel trucks to demonstrate the over-all economy of such units for volume movements of chemicals and other bulk liquids. ■

PRESSURE-DIFFERENTIAL UNLOADING

Dry bulk handling is assisted by pressure differential discharge arrangement in Goodrich Granu-Flow car. Inflatable rubber Granu-Flators take place of slope sheets.

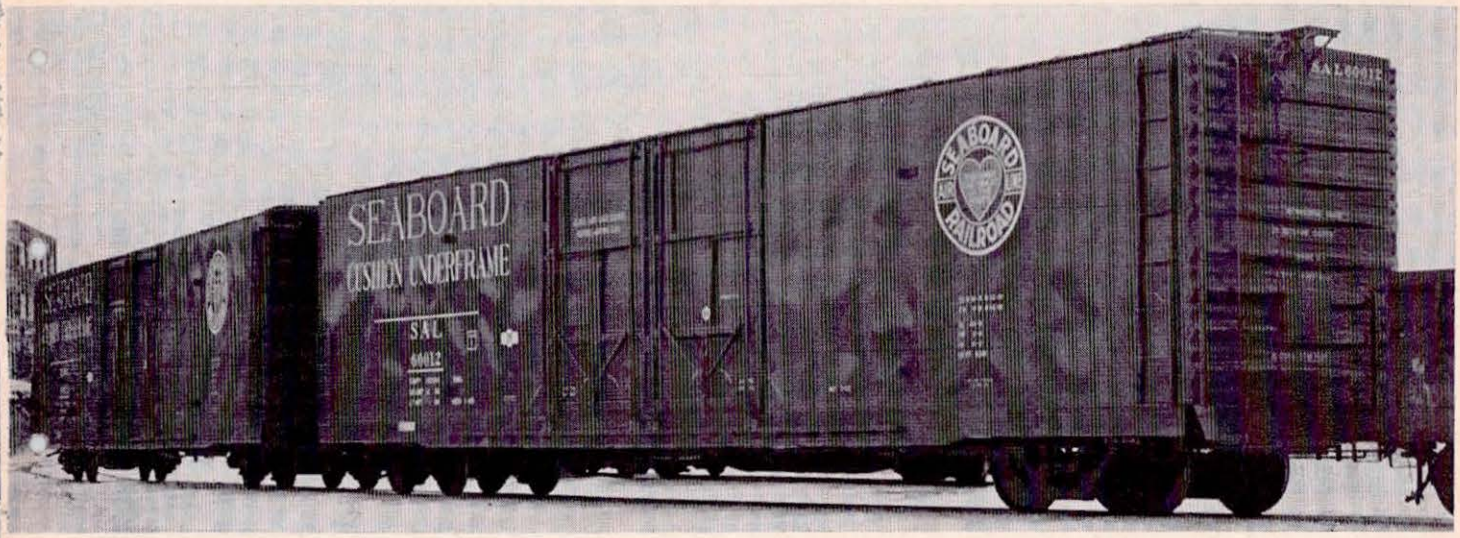


LADING NEEDS TIGHT DOORS

Wet copper concentrate, which extrudes like toothpaste, requires tight drop doors. Gunderson incorporated metal-to-metal seal in these 1,470-cubic-foot, 100-ton cars.

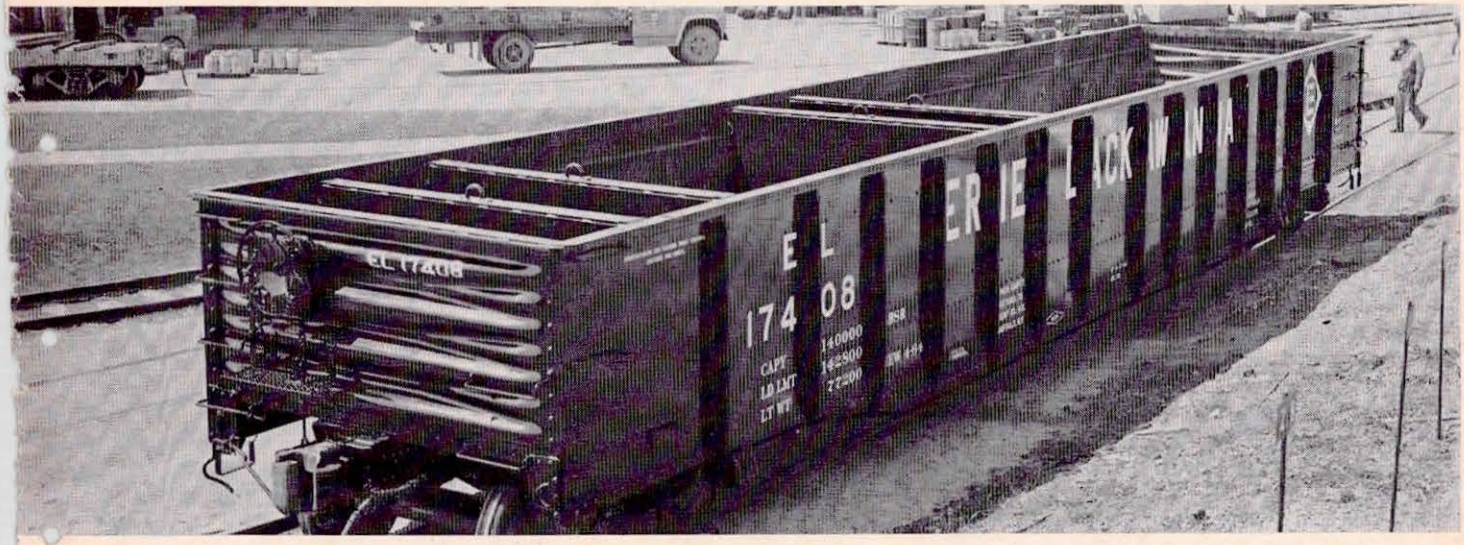
NEW CARS SIMPLIFY DISTRIBUTION

Fifty RB cars insulated with 5 inches of polyurethane make icing and heating of beer shipments unnecessary. This changes distribution practices of Hamm's brewery in St. Paul, Minn. The cars, fitted with cushion underframes and load dividers, are leased from North American, which assembled them in its shop.



DESIGNED FOR PAPER SERVICE

Tailored for handling newsprint, the 25 cushion under-frame cars which Thrall is turning out for Seaboard have 100-ton trucks. The 16-foot door openings simplify lift-truck loading. Car length of 60 feet produces cube of 6,332 cubic feet. Interiors are fitted with belt rails and lading strap anchors.



SIMPLIFIED STEEL LOADING

Erie Lackawanna has been acquiring 70- and 100-ton gondolas for its vital steel traffic. This 70-ton model with welded underframe and riveted sides and ends is fitted with movable bulkheads. The 100-ton models are equipped with skids and lift-off hoods for handling coil-steel shipments. Greenville built both types.

Engineers see bigger role for unit trains

Forthcoming developments require participation by railroads, their suppliers and customers, PRR officer tells conference.

An increasing diversity and volume of bulk materials will be moved by unit trains. This will permit cost reductions that should bind many industries closer and closer to railroads.

That forecast was presented to a recent conference of railway electrical and mechanical engineers by J. J. Clutz, the Pennsylvania's director of research.

● **'Third great development.'** Clutz described the unit train as rail transportation's "third great evolutionary development" of the post-World-War-II era. He said the first two such developments were dieselization and piggyback. Unit trains, he added, promise to be as significant to railroading as both earlier developments.

The federal programs of research and development in high-speed ground transportation for the Northeast Corridor were described at the conference by Dr. R. A. Nelson. Nelson is director of transportation research, U.S. Department of Commerce.

Both men were addressing the annual Railroad Conference of the Institute of Electrical and Electronics Engineers and the American Society of Mechanical Engineers, at Pittsburgh, Pa.

● **The systems concept.** The future unit train for bulk materials, said Clutz, will be the result of systems development which involves much more than just rail transportation. Railroads, their suppliers and their customers must all participate. "Each train will be designed for a specific movement, with cars designed for a specific commodity. Its length and tonnage-capacity will be determined by economic analysis to develop the lowest cost for that particular movement—when geared to the over-all systems concept involved."

Coal producer and consumer facilities and operating practices already are being adjusted to take advantage of the unit train, he continued. The last United Mine Workers contract permits staggering of annual vacations along with Sunday and holiday work, primarily for men who operate automatic equipment for reclaiming coal from live storage and loading it onto trains. New mines, instead of having traditional empty and load tracks, are being built with only one track on which the unit train passes the loading point. "No longer," noted Clutz, "is production shut down when there are no empty cars to load; live storage provides a 'surge' between regular mining and periodic transportation." Comparable changes are being introduced by coal-consuming utilities and at lake-coal trans-shipment points.

● **Unit trains for ore.** Unit trains are in prospect for handling steel-industry raw materials. "Along with the basic oxygen process," explained Clutz, "steel-making efficiency is being improved, and costs reduced, through the use of high-iron-content pellets made from beneficiated low-iron-content taconite. This is rejuvenating the upper-Lake iron-mining industry. It seems probable that within ten years most of the iron ore used will be pelletized. Here, again, the unit train is playing its part."

Handling of import ore

Future import iron ore will move through only a few ocean ports, each equipped for high-speed unloading of ore carriers either directly into unit trains or into live storage. Instead of accumulating thousands of open-top cars for moving the cargoes of the intermittent and unpredictable arrivals of ore ships as is now done, a few train sets of insulated gondolas will operate in unit-train service on rigid schedules. The trains will load from live storage if there is not a ship discharging on the arrival of the empty train.

● **Grain handling will change.** Unit grain trains of the future, Clutz predicted, will be composed of trough-hatch covered hoppers with capacities of 100 tons or greater, capacity which will go into grain country to load—successive trainloads originating at many different points. This will eliminate the present expense of moving grain by truck or single-car shipments to huge elevators at lake ports or other inland concentration points. Regular scheduling of unit grain trains will substantially alter present patterns of movement and overcome the recurrent serious shortages of grain-handling box cars. Unit trains, Clutz concluded, also will be handling other commodities now moved by water, including sulfur, petro-chemicals, cement, limestone, and, possibly, even crude oil and petroleum products.

P. W. Seikman, vice president-general services, Pennsylvania Power & Light, told the conference how the unit train has been a decisive factor in the coal- versus oil- versus atomic competition involved in planning a generating-station expansion which must be in service in eastern Pennsylvania by 1968.

● **Unit train decides the issue.** Decisions about the 800,000-kw of added generating capacity near Harrisburg, Pa., under study by PP&L for some time, have been influenced by the utility's pioneering unit train which went into service late last spring (RA, June 29, 1964, p. 38). The 7,000-ton, 70-car, utility-owned train has been moving coal over the PRR at the rate of 900,000 tons annually to two existing PP&L power stations. The PRR supplies motive power. The train's operating record and costs have been so favorable that the new generating facility will be coal-fired. And PP&L will soon acquire a 10,000-ton unit train to supply the fuel.

"Our principal reason for buying our own coal hoppers is the savings involved," Seikman explained. "The unit-train concept is built around high utilization of equipment. The unit train eliminates many railroad duties and services . . . The 7,000-ton train is the pilot for the future . . . Then coal producers will have to compete with advances being made in nuclear energy."

● **Passengers: Changing picture.** "The most noticeable difference between urban passenger movement of yesteryear and today is demonstrated in the increase in the number of vehicles involved," noted M. A. S. Blurton, Bureau of Economic and Business Research, University of Illinois. "The crisis in urban transport has now been intensified by the acceleration of economic activity and function of living and by the increasing availability of the automobile to the individual and the truck to the firm."

If railroads are going to have an increase in urban passenger traffic, it will be due largely to the adoption by urban areas of a particular growth pattern, Blurton observed. Decentralization would leave railroads with virtually no function as urban passenger carriers. A developing center city

would make the rail transport outlook good.

● **New intercity concepts.** The railroads' future as interurban passenger carriers may be shaped largely by the federal government's interest in ground transportation through that elongated urbanized area—the Northeast Corridor—evolving between Boston and Washington, D.C. President Johnson's recent request for authorization of a program of research and development in high-speed ground transportation is "possibly one of the most significant actions for the rail transportation industry in many years," said Nelson of the Commerce Department. If there is congressional authorization of the $20 million program, its three basic phases will be launched in fiscal 1966.

The first phase, $10 million slotted for R&D, would attempt to improve transportation which, today, is represented by railroads—characterized by ground movement on rights-of-way segregated from general public use. "The technology of ground transportation on separated rights-of-way has lagged behind developments of other modes," explained Nelson. While there have been far-reaching changes in braking, signaling, motive power and vehicle construction, most have been evolutionary with no innovations having had an impact comparable with that of jet engines on air transport.

● **A whole spectrum.** The federal R&D program in ground transport would cover the whole spectrum of possible systems. Already the Massachusetts Institute of Technology, on a Commerce Department grant, has indicated the most fruitful areas of investigation, indicating also that substantial results could be produced by a modest R&D investment. "This, in part," reported Nelson, "is attributable to the transferability of technologies from the defense and space programs."

Federal participation in ground-transport R&D, he explained, is almost inevitable because it probably would not otherwise be done. Private enterprise, including railroads, cannot afford the high-risk expenditures involved. "Moreover," he added, "any new system of ground transportation is likely to be so bound up with public planning considerations that the choice of the new system must be a public one."

● **Test the usefulness.** Demonstration projects on railroads in the Northeast Corridor, the second phase of the federal program, would test the usefulness of improved high-speed ground transportation. These demonstrations, costing $8 million, "should make possible a projection of the results of even greater change," Nelson said. Such projections are desirable before there is any commitment to build a system which might cost from $750 million to well over $3 billion. Government and Northeast Corridor railroads would show the immediate results of improving the comfort, convenience and elapsed time, using present facilities.

Demonstration projects, lasting 12 to 18 months and now planned both for Pennsylvania and New Haven, would involve acquisition of new rolling stock and upgrading of roadbeds and stations, with carriers and government sharing costs. "Generally, the government will pay the added costs of the demonstrations. Increased revenues attributed to the demonstration will be applied to recoup the government's expenditure," said Nelson.

It is expected that a fleet of 28 new self-propelled cars will be used south of New York; an undetermined number north of there. New York-Washington schedule time is expected to be cut from the present minimum of 3 hours 35 minutes to below 3 hours. Nelson reported that demonstrations could start in mid-1966. ■

Modified wheel loaders like this are speeding grain-car handling at Houston.

Rubber-tired 'switcher'

Two switching units consisting of modified rubber-tired loading machines have produced a 50% increase in the speed of handling grain cars at the Port of Houston (Texas) and have reduced manpower requirements. The terminal now handles up to 144 cars in an 8-hour shift. Formerly it unloaded approximately 96 in the same period.

The loader-switchers replace winch-type units. Setting the cables, braking the strings and operation of the deadman winches once required four men. Now only the two loader operators are needed.

In preparing the two Cat 966A Wheel Loaders for switcher work, each was equipped with rear-mounted rigid-type couplers. In addition, on one of the units a front-mounted coupler replaced the lift arms and bucket. On the other machine the lift arms and a 2¾-cu-yd bucket are retained, permitting its use for utility loading and handling around the elevators. The couplers can be disconnected and reapplied if necessary.

● **Longer axles.** To permit the wheels to straddle the tracks, and facilitate use of the rigid couplers, the axles of the loaders were lengthened 12 inches. This provides a 75-inch inside tire clearance. On each machine, air for braking is provided by a 35-cfm compressor and stored in a 30,000-cu-ft tank.

Specifications required that the 140-hp loaders be capable of moving 10 loaded box cars or a string of 30 empties. On occasion they have moved as many as 15 loaded cars at one time, it is reported.

Grain elevators at the Port are served by two tracks, permitting each loader-switcher to handle a string of cars simultaneously. The method of operation is for a loader-switcher to pick up a string of 10 or more loaded cars from a spur track about 700 feet from the elevator. The machine remains coupled to the string, advancing it to the vacuum tube a car at a time. Empties are switched into a siding for later pickup.

● **Two-way radio.** Because the engines of the loader-switchers run at low idle while waiting for the grain cars to be emptied, the generators were replaced by light-duty automotive-type alternators. The units are equipped with two-way radio to speed switching operations.

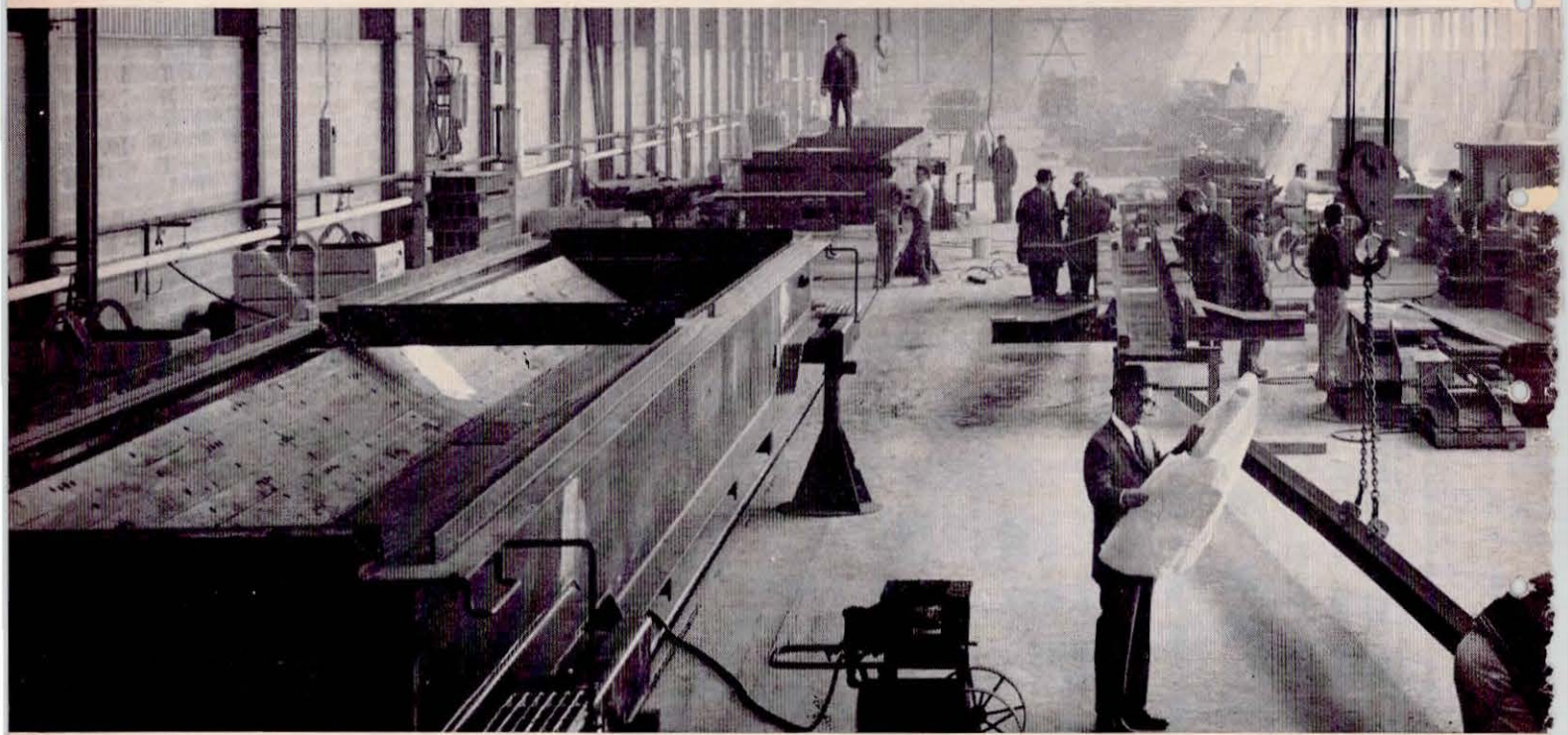
The hourly owning-operating cost of the loaders is estimated to be $6, plus operators' wages. ■

Evans new car plant is equipped to construct a wide variety of specialized freight cars.

The new plant can handle the new longer, larger capacity cars.

EVANS NEW CAR-BUILDING FACILITY

design and construction of specialized freight cars . . .
upgrading . . . running inspection and repair . . . stretch-outs . . .



For more than half a century, Evans has supplied railroads with specialized damage prevention equipment. Now Evans has expanded its service to the actual design and construction of the freight cars themselves.

would make the rail transport outlook good.

● **New intercity concepts.** The railroads' future as interurban passenger carriers may be shaped largely by the federal government's interest in ground transportation through that elongated urbanized area—the Northeast Corridor—evolving between Boston and Washington, D.C. President Johnson's recent request for authorization of a program of research and development in high-speed ground transportation is "possibly one of the most significant actions for the rail transportation industry in many years," said Nelson of the Commerce Department. If there is congressional authorization of the $20 million program, its three basic phases will be launched in fiscal 1966.

The first phase, $10 million slotted for R&D, would attempt to improve transportation which, today, is represented by railroads—characterized by ground movement on rights-of-way segregated from general public use. "The technology of ground transportation on separated rights-of-way has lagged behind developments of other modes," explained Nelson. While there have been far-reaching changes in braking, signaling, motive power and vehicle construction, most have been evolutionary with no innovations having had an impact comparable with that of jet engines on air transport.

● **A whole spectrum.** The federal R&D program in ground transport would cover the whole spectrum of possible systems. Already the Massachusetts Institute of Technology, on a Commerce Department grant, has indicated the most fruitful areas of investigation, indicating also that substantial results could be produced by a modest R&D investment. "This, in part," reported Nelson, "is attributable to the transferability of technologies from the defense and space programs."

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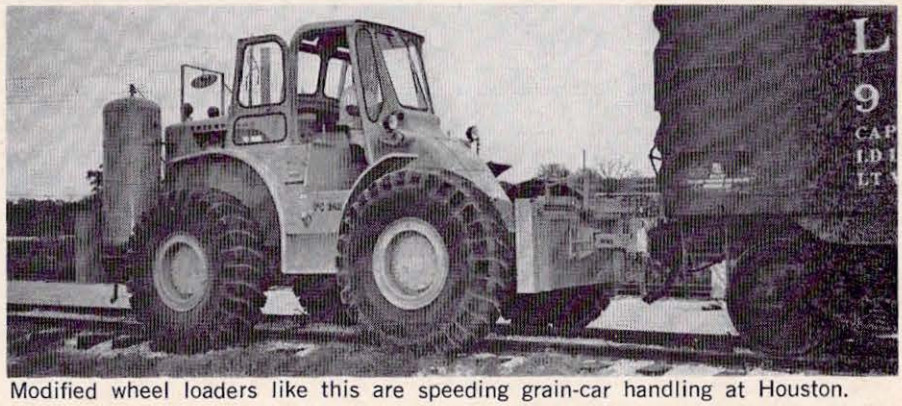

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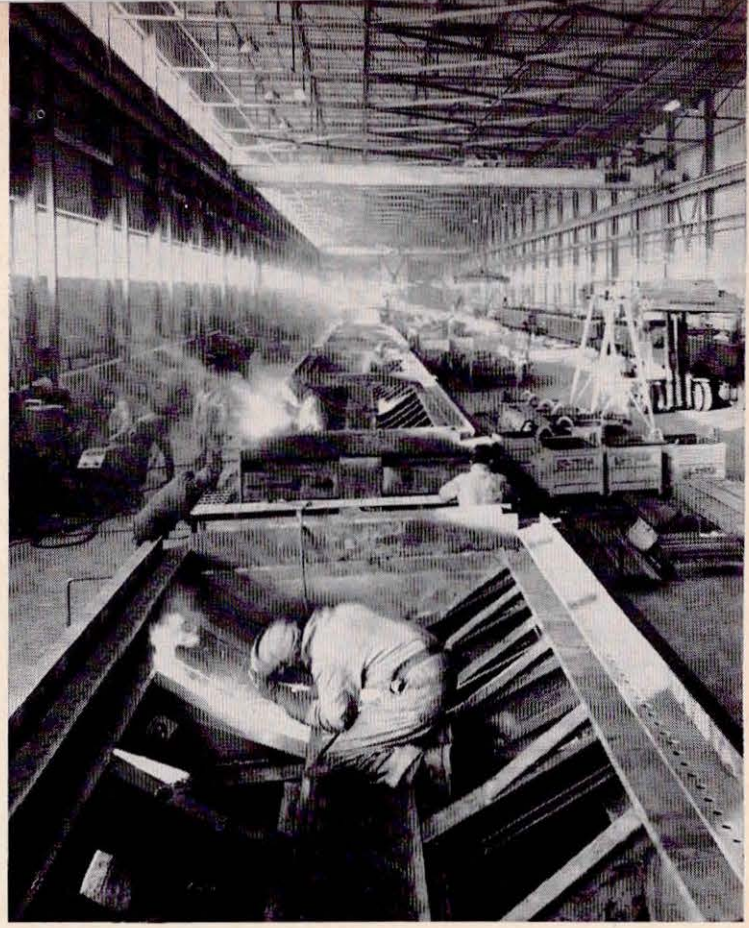

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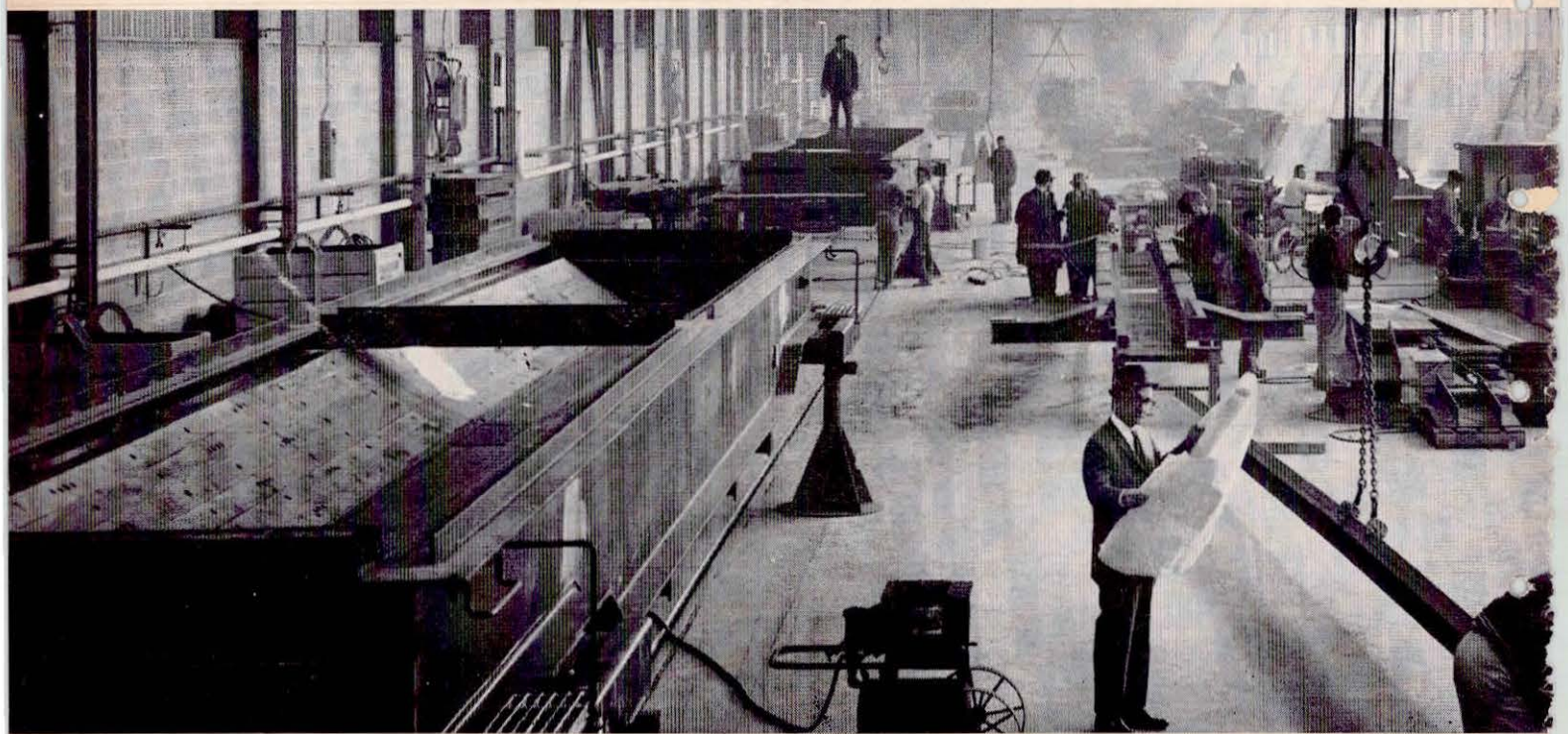
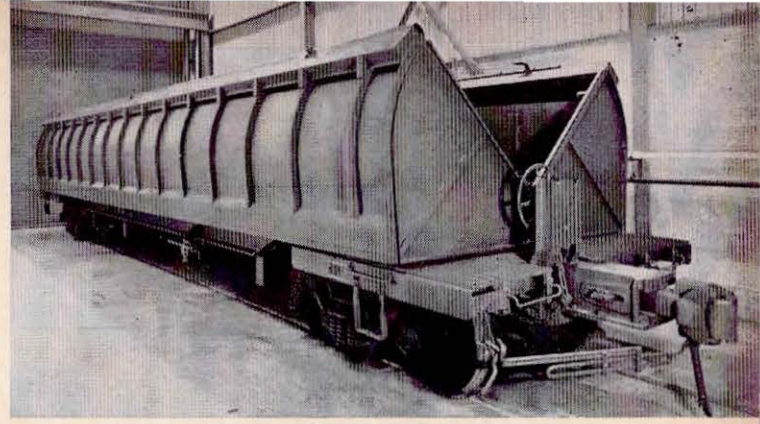


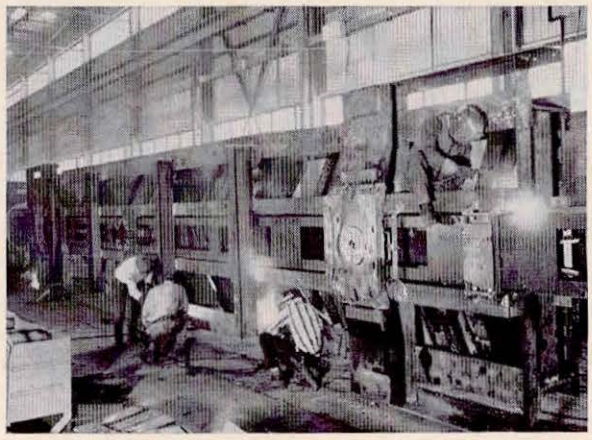
For more than half a century, Evans has supplied railroads with specialized damage prevention equipment. Now Evans has expanded its service to the actual design and construction of the freight cars themselves.

One of 200 Hydra-Cushion equipped coil steel car bodies completed for C & O-B & O.

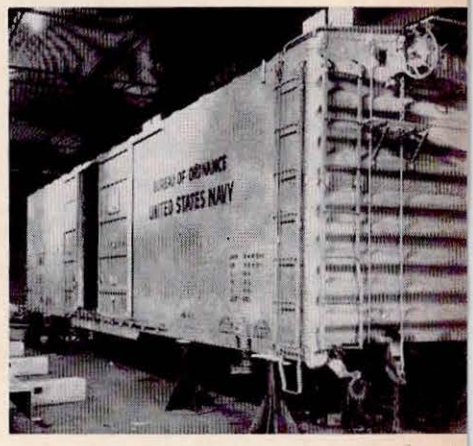


Evans new integral cover is also available on coil steel cars.

One of a series of cars converted by Evans from pulpwood to transformer service.



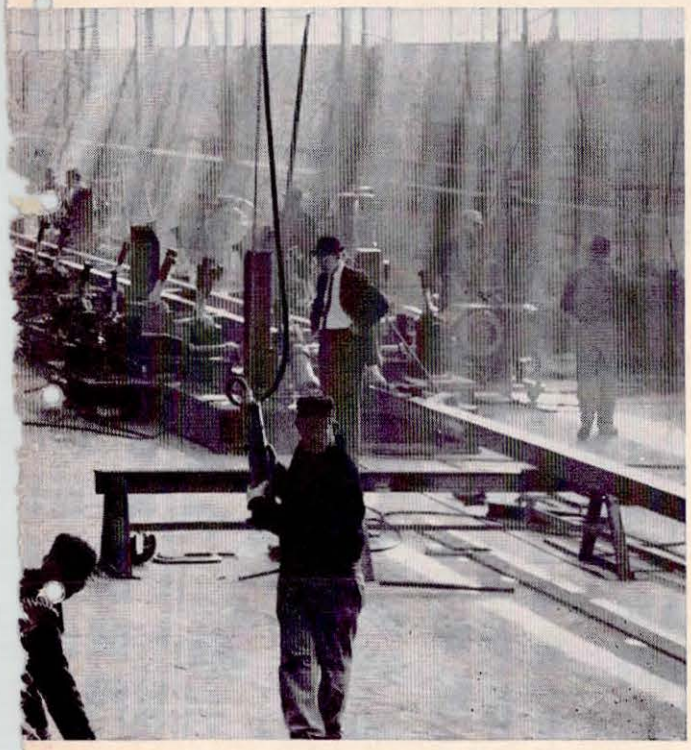
New cars can be designed by us or built around your existing designs.



One of many cars Evans has converted to Hydra-Cushion® Underframe.

. . . NOW BOOKING ORDERS

conversion to Hydra-Cushion* Underframes . . . reconditioning impact testing . . . car components, including underframes



View of one wing of newly built plant showing construction of coil steel cars.

IN FULL PRODUCTION

We've just completed 200 Evans DF®-C coil steel cars for C & O-B & O. In addition to orders on hand from other railroads for Hydra-Cushion equipped flat cars and coil steel cars, we're also booking orders for a wide variety of other new specialized freight cars.

Our new facility at Plymouth, Michigan offers railroads a new source for railroad cars and components . . . from design, construction and testing of new cars through complete reworking and re-equipping of existing cars.

We'd like to show you through our new facility at any time convenient to you. Just let us know when you'd like to visit us.

*Reg. T. M. of Hydra-Cushion, Inc.

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TRANSPORTATION EQUIPMENT DIVISION

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EVANS PRODUCTS COMPANY PLYMOUTH, MICHIGAN

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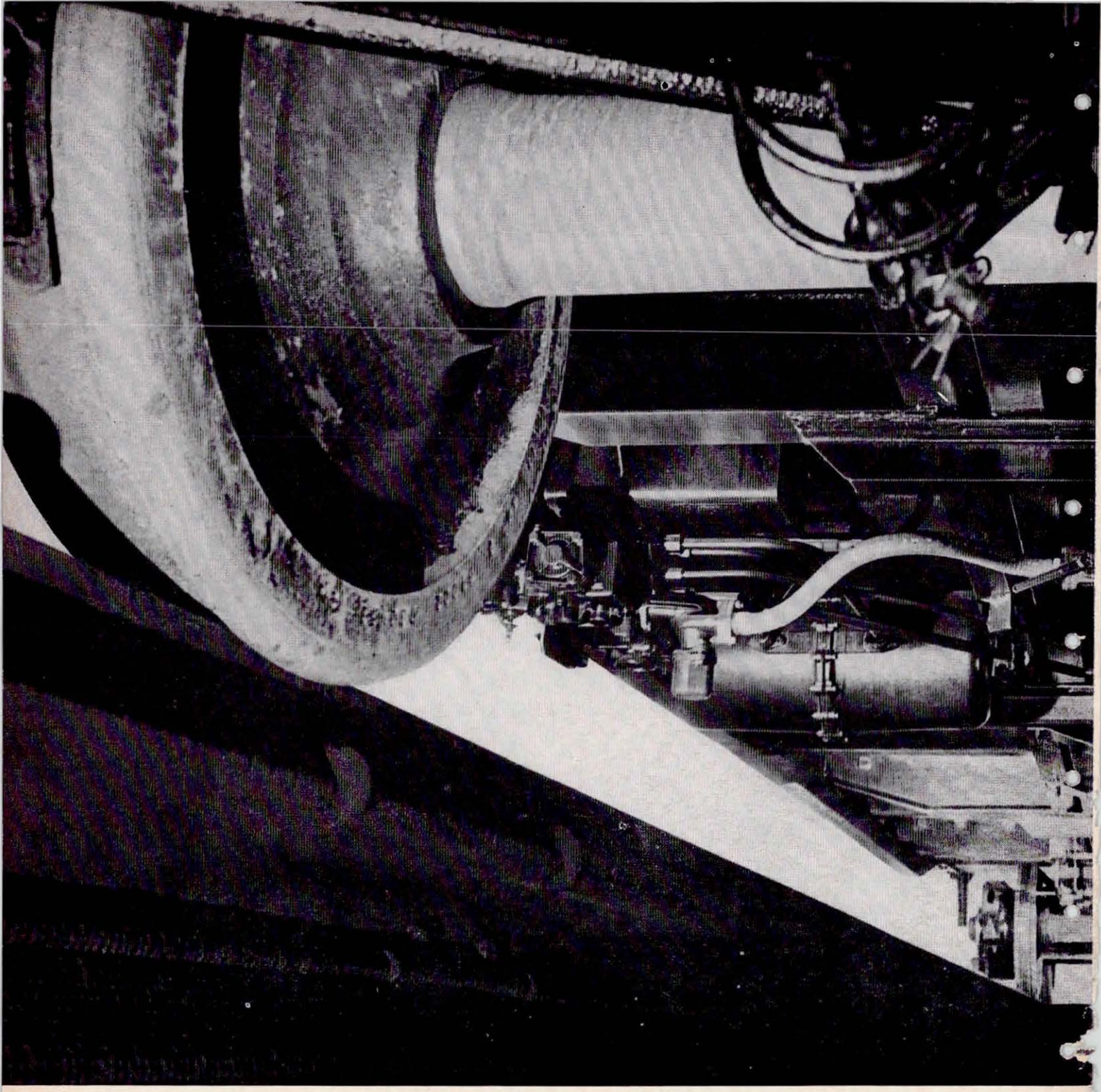
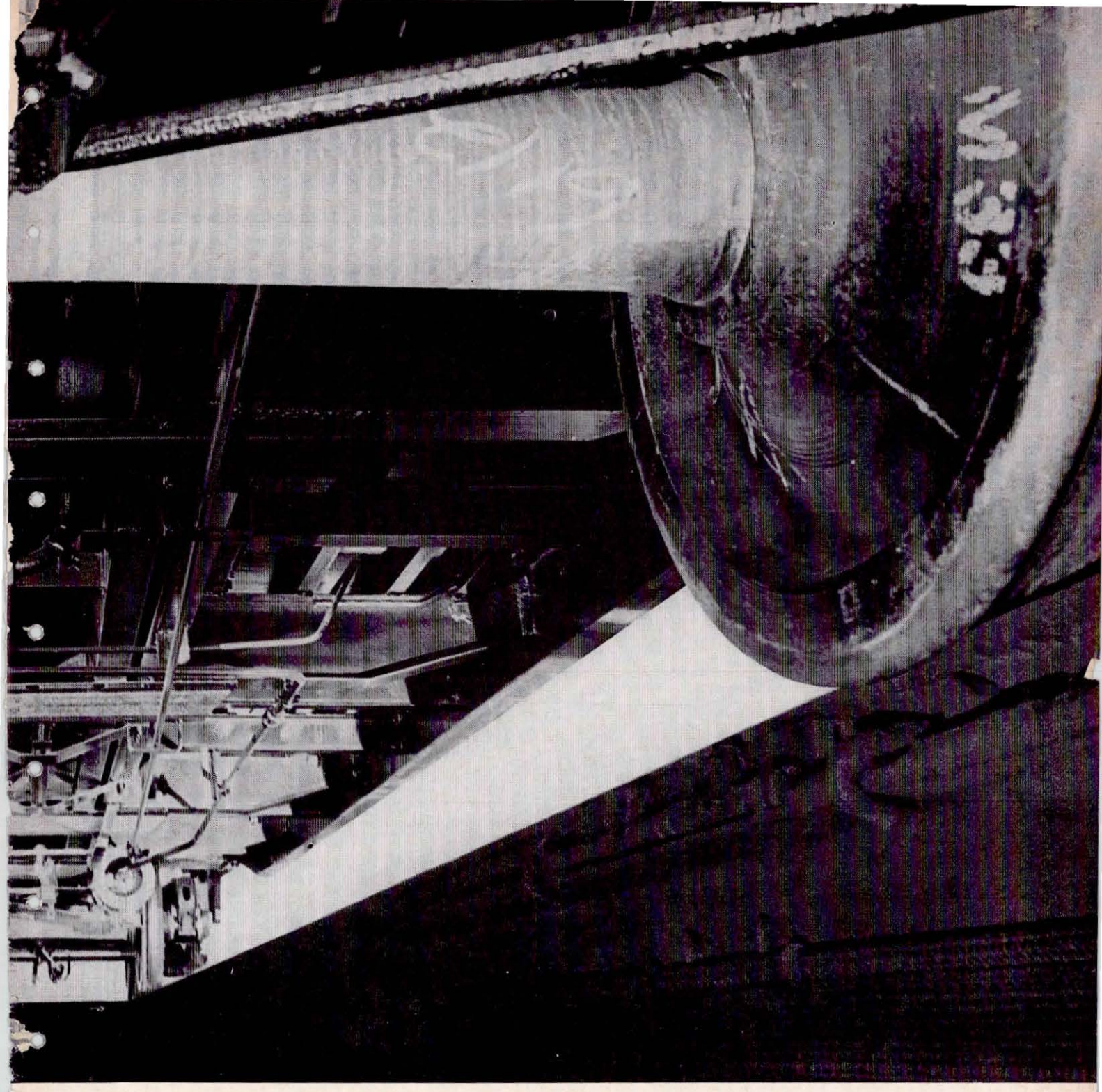


New ACF Precision Design Boxcar puts strength where you need it, yet cuts weight up to 3 tons

The ACF Precision Design Boxcar is a major advance in railroad car construction. It's a concept already proven in service with 7,000 boxcars on 25 railroads.

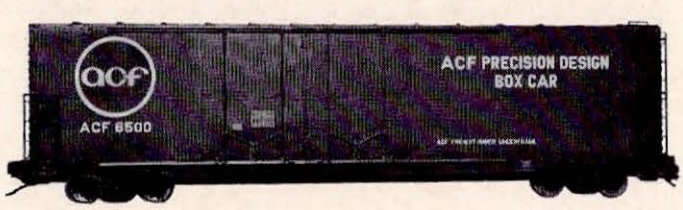
The Precision Design Boxcar is tailored to your traffic needs. It's built from matched, pretested components. Each is rated for the load it carries. Your car is never over-designed or under-designed.

ACF's use of stronger materials and precision design reduces weight 2,000 to 6,000 lbs. without sacrificing strength. Provides bigger payloads, cuts maintenance.



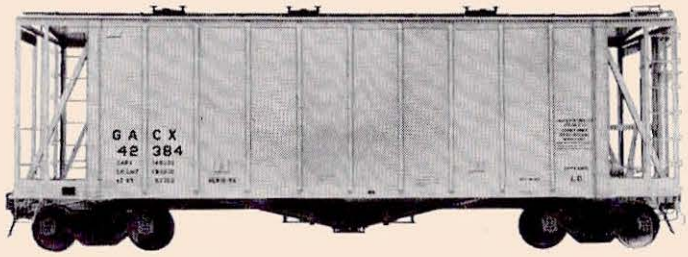
You choose 50-ft. or 60-ft. boxcars, fork lift truck loads from 12,000 lbs. to 60,000 lbs., interior equipment, load-restraining devices. You even select from more than 50 combinations of different door sizes and locations.

Have your ACF representative explain all the profitable advantages that ACF Precision Design Boxcars offer you. Call or write American Car & Foundry Division, ACF Industries, Incorporated, 110 Clark Street, St. Charles, Missouri 63301, or our sales offices in New York, Chicago, Cleveland, St. Louis, San Francisco, Washington, D.C.



acf **ACF INDUSTRIES**

There will be many more new railroad cars carrying bulk starch this year.



They are called

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GATX's patented Airslide Car is the way to ship bulk starch. Or many other dry bulk granular or powdered products. Because the Airslide fluidizes your lading to prevent bridging and packing and allows unloading into any conveying system. As well as insuring that your load travels well protected against contamination all the way. No matter which size you ship in. (2600 cu. ft. or 4100 cu. ft.)

For more information on shipping dry bulk materials by Airslide Car, just call or write one of our GATX Airslide Car people in the **FREIGHT CAR DIVISION.** In case you missed the name, it's Airslide Car.

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GATX

• **The Chicago and Northwestern Railroad Company** uses Double-Cover POLYCLUTCH Lining in center-discharge, 4,000-cubic-foot-capacity covered hopper cars constructed by Pullman-Standard Division of Pullman, Inc.

One coat does the work of two with new Double-Cover POLYCLUTCH® Lining!

A single coat of this remarkable lining for covered hopper cars gives equivalent dry film thickness of two-coat systems.

Pittsburgh's POLYCLUTCH gives you:

• **Less overspray loss,** reducing gallonage per car.

• **Longer-lasting coating,** because Double-Cover POLYCLUTCH is tough, flexible; protects against abrasion, impact and successive cleanings.

• **Quick, easy application,** with either airless or conventional cold spraying equipment.

• **Fast drying;** no waiting for drying between coats. Cars are put back into service faster.

• **Cleaner cars,** because you don't enter them again to apply a second coat.

• **Faster unloading,** because ladings slip and slide easily; won't stick to POLYCLUTCH's hard, smooth, non-porous surface.

• **No contamination losses,** as this non-toxic lining is tasteless, odorless, and has no effect on foodstuffs. Approved by the U. S. Food & Drug Administration.

• **For additional facts** about Double-Cover POLYCLUTCH, and how it does a better job at less cost, write Pittsburgh Plate Glass Co., National Accounts Division, 1 Gateway Center, Pittsburgh 22, Pa.

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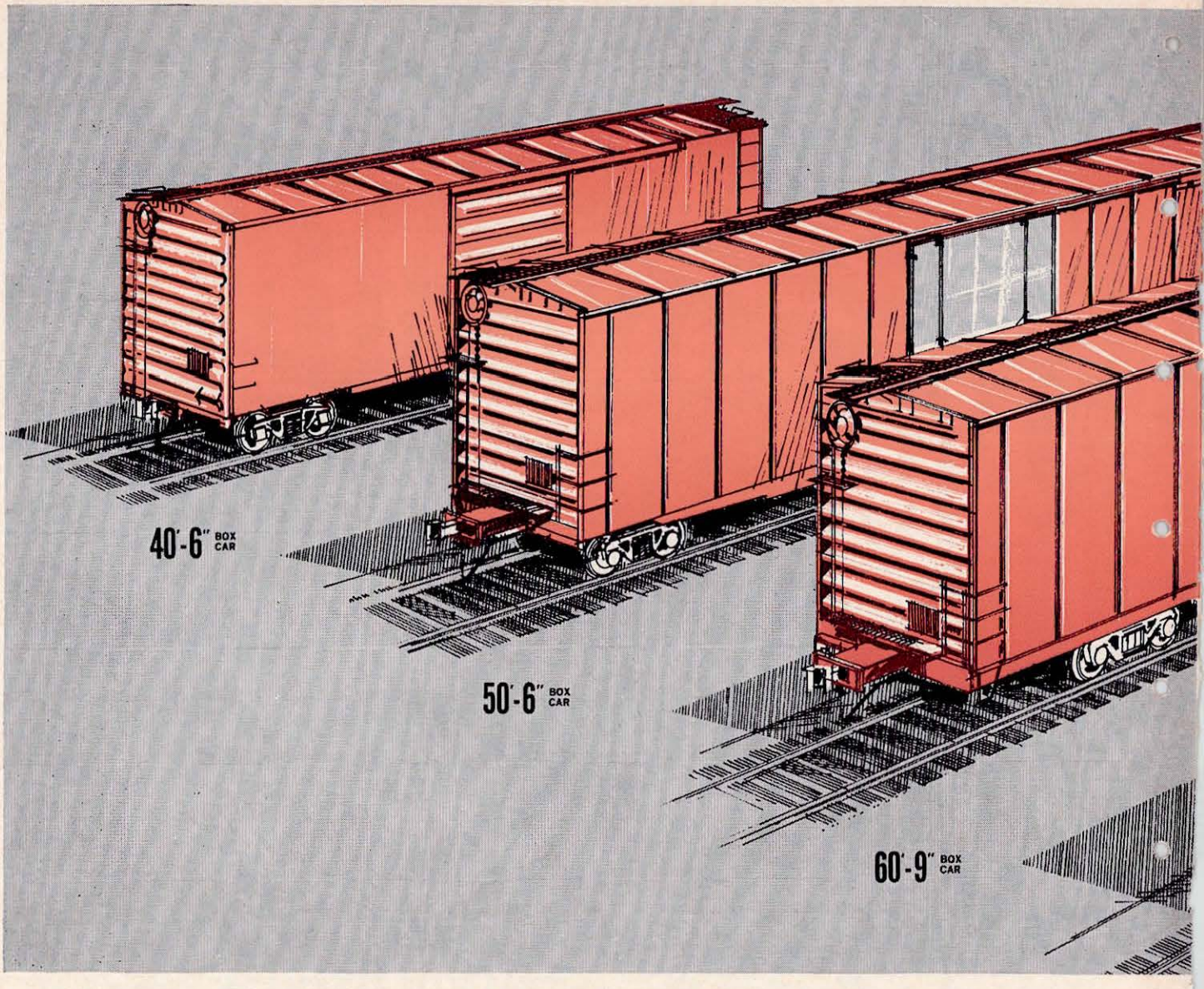


The One Big Reason You Should Buy a P-S Box Car

...TO MAKE MONEY!

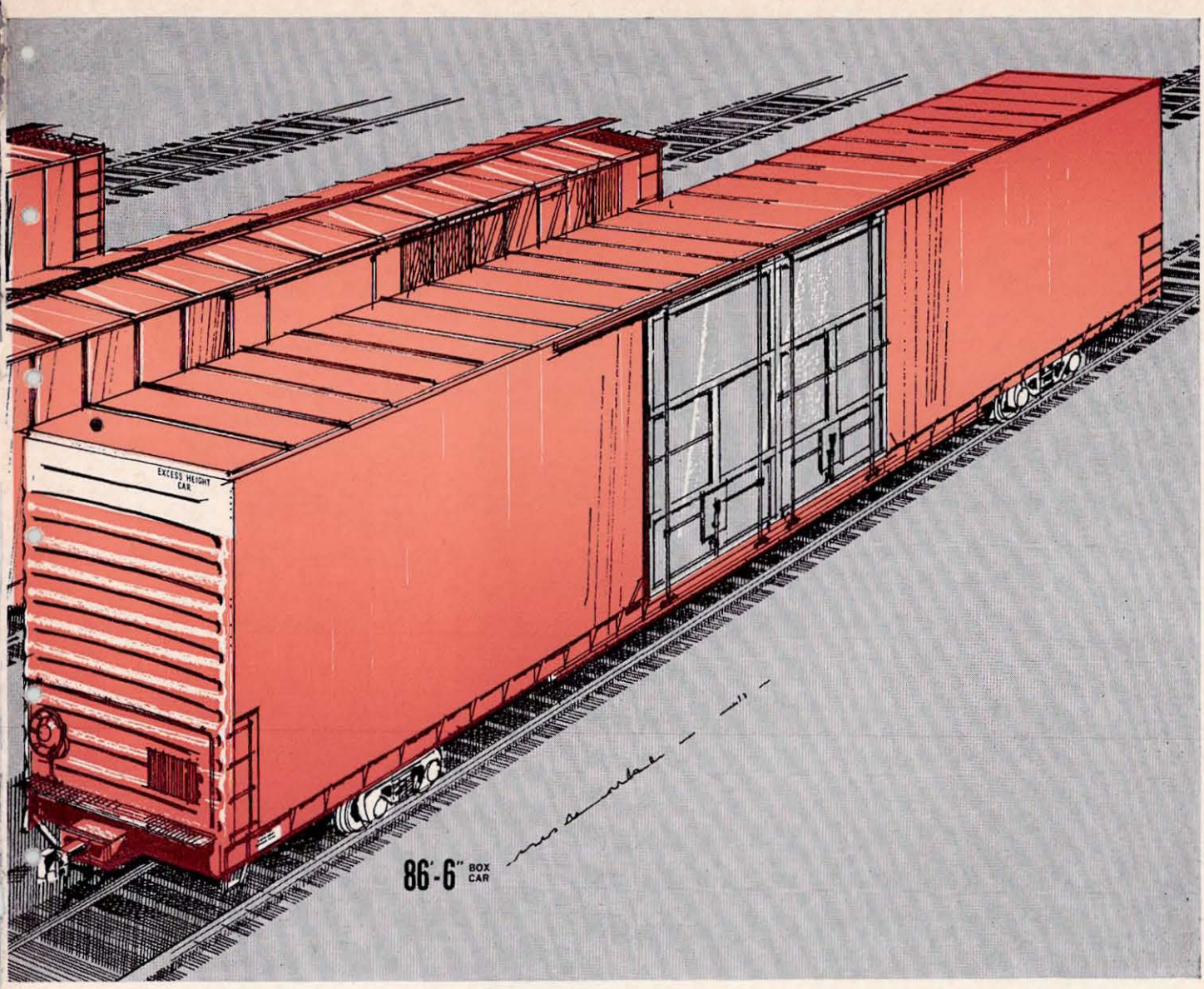
Buy the right car, provide it at the right place, at the right time, and as any shipper-conscious railroad knows, you've got the essentials for making money. Designing and building that "right car" . . . the one best suited to your needs and requirements, as well as those of your shipper-customers . . . is the job in which Pullman-Standard excels.

P-S Box Cars are a good example. Pullman-Standard can and does produce a wide range of types and sizes, with an equally wide selection of special features. Only the facilities of the world's leading carbuilder are geared to mass-produce so many sizes and types of box cars, with nearly endless combinations of options and special features. To illustrate this point, P-S records of a typical week show over 300 box cars laid down, built or delivered. Here's the car mix . . . 40-, 60- and 86-foot lengths built. And 40-, 50-, 60- and 86-foot cars, with truck capacities of 50-, 70- and 100-tons delivered. One lot of cars had no cushioning devices, two different lots had Hydroframe-60® cushioned underframes and one lot had Hydroframe-40® cushioned underframes. Still another lot had end-of-car cushioning.

Other equipment variations, during this week's operations, included four sizes of doors, both plug and sliding types and three different kinds of flooring. There were cars of both inside and outside stake construction. Some had journal bearings, others had roller bearings. Some had interior lading protection devices, others did not.

Such design flexibility and manufacturing versatility offer you customized box cars with quality mass production economies, whether your car order is large or small.

To learn more about how the full range of P-S Box Cars can help make more money and save money for your railroad, contact any of the P-S offices listed at right. Or write for the new P-S Box Car brochure.



40'-6" BOX CAR*

This standard, general purpose 40'-6", 50-ton capacity, P-S Box Car has wood flooring and lining. Trucks are journal bearing type. Doors are 8-foot, sliding type. Wider or narrower doors are available, as are gate or bar type load dividers, lading strap anchors of any type, floor protection plates for doorway areas and other options.

50'-6" BOX CAR*

Center-of-car cushioning is a feature of this particular 50'-6", 70-ton P-S Box Car. Car shown has 10-foot plug type, aluminum doors, outside side post construction, nailable steel flooring, interior lading strap anchors and roller bearing trucks. Insulated construction, any type of cushioning and other alternates could be selected.

60'-9" BOX CAR*

This 60'-9", 100-ton P-S Box Car is designed to carry high-density, damage-susceptible loads. It has center-of-car cushioning and single sheath construction, with exterior side posts. Some of the optional features shown are 12-foot plug doors and roller bearing trucks. Other alternates and options may be chosen to fit user needs.

86'-6" BOX CAR*

This Hy-Cube excess height car, with 70-ton trucks and 9,565 cu. ft. capacity is designed to carry low-density finished goods. It has 20-foot aluminum plug doors, center-of-car cushioning and nailable steel flooring. Special bulkheads, alternate flooring material and door arrangements represent some of the additional options available.

**In all P-S Box Cars, standardization of many component parts and structural assemblies gives buyers service-proved strength and durability plus the economies of quality mass production. However, P-S standardization is sufficiently flexible to permit installation or interchange of a wide range of specialties or alternates, no matter what size or type of box car is selected.*

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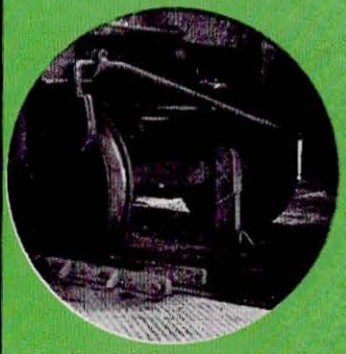
GEARED TO PROGRESS
P I B
MEMBER

Rabbit for moving string of cars into repair shop.

Rabbit engaging car axle.



Smaller Rabbit moving car out of repair shop.

Heavy-duty Rabbit on locomotive repair system.

which

RABBIT

For Your Spot Car Repair System?

Controlled by push button, powered by electric car pullers, these Rabbits deliver cars safely when and where wanted. ■ RMC makes Rabbits for locomotive and car repair systems, car cleaning and upgrading systems. There are now 65 Rabbit equipped tracks in service. ■ Ask for data on Rabbits for car handling.

Railway Maintenance Corporation

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CURRENT QUESTIONS

Stock plan for workers?

To the Question and Answer Editor:

Although the railroad industry as a whole has experienced an encouraging year, storm clouds are forming on the horizon. The profit margin remains dangerously low, more waterway projects are contemplated, and union leaders are clamoring for nationalization. The first two problems are, for the most part, out of our hands; however, the final malady is solvable.

Several very interesting analyses of the problem have been offered in recent issues of Railway Age. Dr. Robert N. McMurry [RA, March 1, p. 14] emphasized the need for an enlarged channel of communication between management and labor.

He illustrated the existence of the "we" group and "they" group in labor's thought. Initiation of new ideas was Dr. McMurry's suggestion for the extinction of these group identities.

Certainly, management cannot become labor, but labor can become management. That is, by the implementation, through unilateral managerial direction, of an employee stock plan for all departments.

My proposal is to allow all employees, with over six months' continuous service, to purchase company stock at its average price over the preceding five years—provided they agree not to transfer the shares for two years. There would be a limit placed on the number of shares one employee may purchase in a year, thus eliminating the probability of abuse.

The six-month rider insures that only well-established employees may participate, hence making the road a more attractive employer for the young man with definite goals.

Averaging the price over the preceding five years would, in most cases, offer an immediate financial benefit, thus assuring the acceptance of such a program. The stock could be purchased in even share amounts or by a monthly deduction.

Limiting the number of shares available per year, according to position and seniority in addition to creating a minimum retention period before general divestment, should eliminate abuses.

However, an employee could, for various reasons, redeem his stock for the purchase price within the first two years.

The benefits of such a program would snowball with the passing of time. Employees, as partners, would be more receptive to management's problems and their alleviation.

Employees express many opinions while in their social groups. Much of the current "Railroads are on their way out" diatribe could be dispelled by contented employees extolling the merits of *their* railroad.

Public relations would not be the only beneficiary of proud employees. A more careful and efficient use of time and equipment would also result.

Of course, the shareholders would have to ratify the plan, but would it not be a small price to pay for the aforementioned benefits? *William Joe Burton.*

(Mr. Burton's proposal that employees by given additional incentives to become part owners of the railroads for which they work is an interesting one. Many railroads already have in existence plans whereby an employee may use payroll deductions to purchase stock; are there any that offer stock to employees at a special reduced price? —Editor.)

Load limits requested

To the Question and Answer Editor:

Why doesn't the "Official Railway Equipment Register" publish "load limits" of cars?

The increase in incentive rates has increased the number of requests from shippers for a box car of a specified length to load X pounds to Blank City.

This requires physically checking the stenciled load limit on several cars to locate a car of the proper load limit. This frequently causes considerable delay in placing the proper car.

(This question was submitted by the manager of a railroad in the South who prefers not to be otherwise identified. We would be interested in hearing from other readers who are troubled by this problem.—Editor.)

This department provides a forum for railroaders who want to explore questions of importance to their industry. Both questions and answers will be welcomed from readers at all levels of responsibility in the industry and associated fields. Railway Age will pay $10 to any reader submitting a question that forms the basis of a column discussion. Correspondence should be addressed to Question and Answer Editor, Railway Age, 30 Church Street, New York, N.Y. 10007.

LETTERS FROM READERS

Heavier cars and rail wear

Quebec, Can.

To the Editor:

Having sorted out the various facts and figures relating to gross tonnage, axle loads, wheel diameters, staggered rail joints, rail fractures, etc., it seems to me that the conclusions are fairly obvious. Basically it amounts to this: Rail metallurgy has about reached its limit in terms of cost, so cars should be designed to save the rail from undue wear and damage. This means that axle loads should not exceed 27 tons which, in turn, means that laden cars of a gross weight of 220,000 pounds or more should have three-axle trucks. Sure, this will increase the prime cost of the car but both the car and the truck will have increased life and reduced maintenance.

The other factor which causes trouble is staggered rail joints. Surely these are bound to cause rocking whatever length the rails. Rail joints bend under traffic and a truly rigid joint has never been made—apart from welding. Rocking can be eliminated by the use of opposing, instead of staggering, joints. Other countries have known this for years and I am surprised that the American roads have never tumbled to it.

Maybe I am over-simplifying these aspects, but I feel that plenty of authorities would back me up.

G. Richard Parkes

[In his final paragraph above, Mr. Parkes, we believe, answers his own letter—especially on the question of staggered joints. The track-to-axle-load relationship is vastly different in countries with light axle loads, from those where such loads are heavy, as in North America.—Editor.]

Northeast Corridor

Washington, D.C.

To the Editor:

Your thoughtful comments about the Northeast Corridor Transportation Project in the "Monday Morning Report," March 29 issue, are appreciated. It must be noted, however, that your statement to the effect that one-half of the $20 million requested from Congress for the project, if approved, will "be spent on looking into the possibilities of such nebulous projects as service by supersonic aircraft, air-cushioned vehicles, automatic highways and other non-railroad alternatives" to the "Pell Plan" is not quite correct. None of the $20 million is planned for research and development of supersonic aircraft or automatic highways; the funds ($10 million) will be spent for the advancement of technology in rail transportation or for systems which, like railroads, operate on rights-of-way segregated from general public use.

The appropriation of $10 million for research and development in high speed ground transportation would mark the beginning of a Federal effort to make available to railroads the fruits of the basic research from which competing modes have long benefited. This program is based on evidence that research and development in ground transportation, as defined above, would be highly productive and lead to improvement of the transportation system of the nation.

Several areas of inquiry are being considered which relate directly to the present system of rail transportation. These include, but are not limited to:

1. Theory of the dynamics of wheel-rail interaction.
2. The dynamics of soil mechanics (as differentiated from static loading).
3. Improvement of suspension, both active and passive.
4. Incorporation of solid state devices into electric propulsion.
5. Reduction of aerodynamic drag.

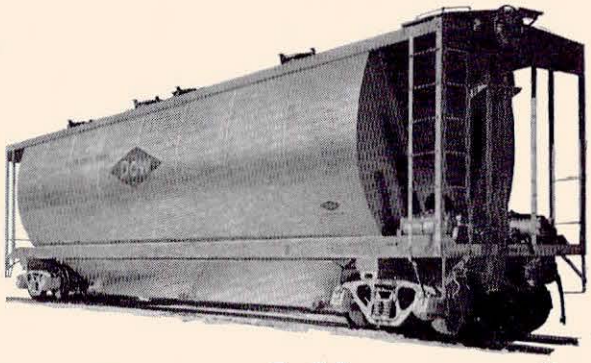
Progress made in any of these areas can be of substantial benefit to railroads.

Robert A. Nelson
Manager, Northeast Corridor Transportation Project
U.S. Department of Commerce

[We welcome Dr. Nelson's clarification of the objectives for which $10 million—of the proposed appropriation of $20 million for the Northeast Corridor Project—is to be spent. The important point, as we see it, is that an outlay of only $8 million is planned at this time on experiments looking toward much higher speeds by trains on existing (somewhat improved) trackage, using equipment not markedly different from already existing prototypes. This modest proposed outlay represents quite a contrast to the highly publicized estimated expenditure of $1 billion for faster trains, which has got some people to worrying lest the federal government should become as generous in pouring money into railroads as it has into highways, airports and waterways—thus risking socialization of the railroads. Our inclination is to view the proposed $8 million outlay — while helpful — as microscopically modest, compared to the government's promotional expenditures on other modes of transportation. —Editor.]

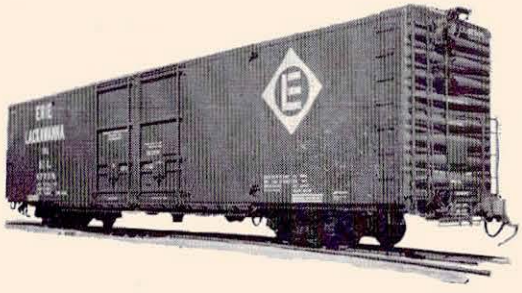
the answer to better car

.....from nuts

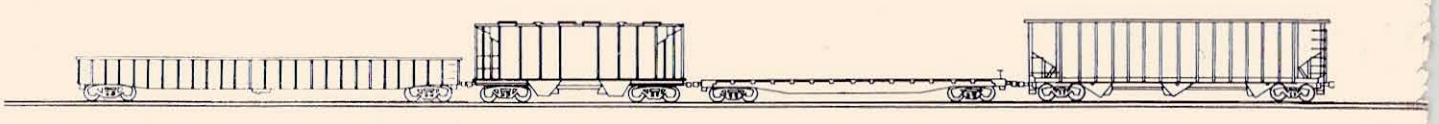


to steel coils

to automobile engines



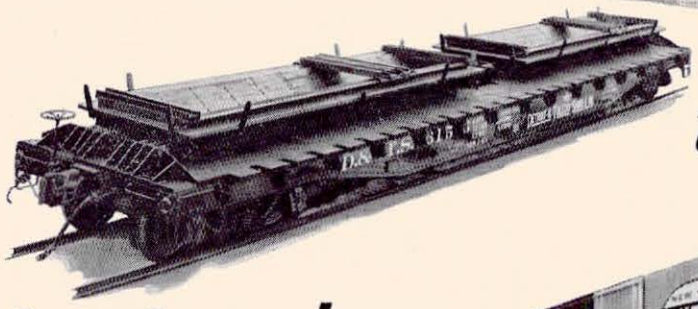
move faster, with less handling



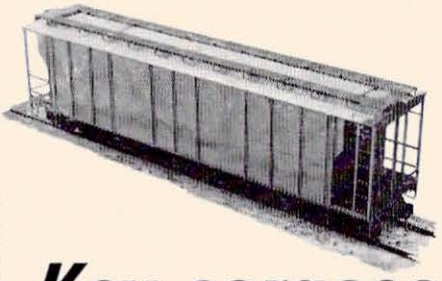
utilization may be here

to wheat

to chemicals



to salt



to stampings

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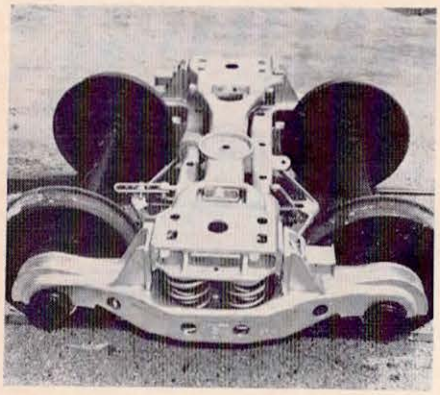
NEW PRODUCTS REPORT



Car Truck (RA-1)

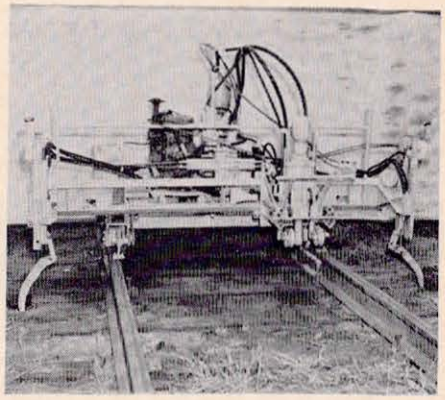
Permanently lubricated and sealed spherical bearings in transoms of the Express Freight truck for high-speed, high-mileage cars are said to maintain rigid tram to minimize wheel wear while providing lateral flexibility which gives an equalized ride over any track. Spring locations, higher and wider than standard, reduce carbody sway while making possible the use of long-travel springs with greater protection for fragile loads which this soft suspension makes possible. Unsprung weight in truck is minimized while uniform journal-bearing loading is assured. Lateral cushioning is provided at journal bearings. While there are a minimum of wear points, those which exist incorporate machined wear-plate pads for close tolerances and non-metallic snubbers to control both vertical and lateral displacement. Truck is readily assembled and disassembled; springs are easily inspected and replaced. Currently under test are installations on caboose and head-end cars. The 70- and 100-ton freight-car versions will soon be in service. *Rockwell Manufacturing Co.*

Aluminum Cleaner (RA-5)

Aluminu, a formula of special interest to the railroad industry for cleaning new or old aluminum surfaces, is brushed on like paint, sprayed, or rolled onto any aluminum surface and, after 10 min, is rinsed off with plain water. No rubbing is required. The formula is said to be harmless to hands and to require no special precautions. It has been tested by the U.S. Navy and the Cadillac Motor Car Division of General Motors. *J. D. Anderson Co.*

Shock Indicator (RA-2)

The Omni-G shock indicator monitors shock forces simultaneously from all directions and registers excessive impact forces. The 2-oz instrument can be attached to products, panels, switches, or packages to monitor shipments. It is available in sensitivity ratings ranging from 5 to 150 g, in 5-g increments. Calibrations as precise as 1 g may be ordered. Accuracy is said to be assured within 10% of the instrument's rated g value. *Impact-O-Graph.*



Nipper Attachment (RA-3)

Recently announced is a tie nipper attachment for the Fairmont W100 hydraulic spike driver. Nipping is done by hydraulic power using one of the circuits already on the machine.

There are dual control levers at each end of the driver track, one lever to engage the hooks and the other to pull the tie up against the rail. This attachment can be applied to new units and also to those now in service. *Fairmont Railway Motors, Inc.*

Infra-Red Heaters (RA-4)

Workers and materials may be kept warm, even in frigid outdoor air, by the use of portable infra-red heaters. Designated Solaronics Gas Infra-Red heaters, these units are said to convert approximately 62% of the Btu input into effective radiant energy.

They are available in 10 portable models weighing from 8 lb (for Model P15C) to 52 lb (for Model M-Cart). All models are furnished complete with hose and presure regulator. *Solaronics.*

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4/19/65

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RAILROADING AFTER HOURS WITH JIM LYNE

LYNE

THE VIEW FROM THE CABOOSE—On the matter of seeing and smelling hotboxes from cabooses that I brought up here April 5, President Perry Shoemaker of the CNJ suggests that my observations are the results of "office railroading." What I didn't realize, and should have, is that the smell from a hotbox is generated, usually, by burning wool waste. Hence, if the journals have roller bearings or are automatically lubricated, a hotbox will develop little tell-tale smell.

The smell, if there is one, could get around a big car all right, and back to the caboose—but how's that going to help if there's little or no smell there? If there's an oversize freight car just ahead of the caboose, the train crew will have to do most of its hotbox detection, visual if not olfactory, when the train rounds a curve.

Meantime the hotbox record continues to get better—1,175,689 car-miles per set-out in 1964, an improvement of almost 16% in a single year. Improved bearings and better lubrication are doing for an ancient malady of railroading what insulin has done to diabetes. And miracle medication of similar magnitude has done away with transverse fissures in rails.

INVENTORS' ENTHUSIASM—Railroad directors, who are shown a superior device and fail to approve its use, should be indicted for manslaughter if people lose their lives because of continued use of inferior devices. This was the dictum of an unnamed British lord in a letter printed in Mechanic's Magazine of February 17, 1849 (and thanks to W. H. Hargett of St. Louis for showing me the printed letter). The question came up regarding a device known as Hardy's Patent Axle for Railway Carriages, which his lordship asserted had been shown in tests not to break under the heaviest loads and shocks. But railway directors refused to approve this laudable device and his lordship proposed that there be meted out to them:

"The punishment due to manslaughter for every life destroyed on account of broken axles. A heavy pecuniary solatium for every limb lost by your preposterous preference of the unsafe for the safe."

Thus it appears that, even back those days, inventors and their friends were not lacking in some degree of zeal for the merits of their products.

AWAY-FROM-HOME LODGINGS—I have had some correspondence with Vice-President R. L. McCollum of the BLF&E at Tuscumbia, Ala., on the application of the away-from-home lodgings provisions of the recent agreement between the railroads and the operating unions. He suspects that some railroads are dragging their feet a little in applying this agreement—e.g., by seeking to put more than one man in a bedroom and by not furnishing transportation between yards and the lodgings provided.

I have noted for years considerable differences existing in arrangements for lodgings and meals, on different railroads, and even at different terminals on the same railroad. Some of the Railroad YMCA's I've seen have struck me as probably one of the best answers that there could be to this problem—comfort and cleanliness, but without expensive luxury.

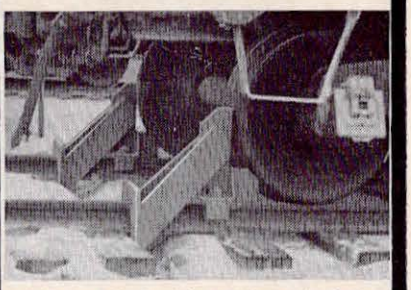
There are two antithetical viewpoints on this situation—the one that of the employee who may aspire to *de luxe* hotel accommodations, and the frugal supervisor who may feel that the employee should be satisfied with minimum facilities because, after all, he's getting them for free.

JUST FOR THE KIDS—I am grateful to the Louisville & Nashville for sending me an attractive photographic jig-saw puzzle (10½ in. by 11 in.) of its $11,000,000 automated DeCoursey freight yard at Covington, Ky. The youngster who gets his lucky hands on this puzzle will know a lot about modern freight yards when he gets the pieces together.

Also for the small fry—Tom Sinclair of the educational section of the public relations department of the AAR has sent me a set of colored comics—each 16 pages, 7 in. by 10 in.—each imparting information about some aspect of railroading in illustrated narrative form, as the funny papers do.

The program of publishing these booklets is now in its thirteenth year, the AAR being a pioneer user of this device for industrial communication (largely with school teachers). Over 39,000,000 copies have been circulated.

SPECIALISTS
SINCE 1903
WHEEL STOPS



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PEOPLE IN THE NEWS

ATLANTIC COAST LINE.—Terence O'Brien appointed assistant to vice president—operations, Jacksonville, Fla. **D. M. Strickland** named superintendent terminals, Jacksonville. **S. E. Davis** appointed trainmaster, Waycross, Ga., succeeding Mr. Strickland. **W. T. Hensley** named general agent, Richmond, Va. **T. H. Jones** appointed assistant general freight agent, Mulberry, Fla.

L. P. King general agent, Detroit, appointed district sales manager there.

CANADIAN NATIONAL.—Leonard J. Mills, comptroller, Montreal, appointed assistant vice president—accounting there.

CENTRAL OF GEORGIA.—G. C. Chester, communications engineer, Macon, Ga., appointed assistant communications superintendent there.

CENTRAL OF NEW JERSEY.—John C. Powers appointed general agent in charge of a newly opened traffic office at Montreal. **William J. Desmond** succeeds Mr. Powers as general agent, Pittsburgh.

John D. Gaspartich appointed director of research, Jersey City, succeeding **Walter L. Mitchell,** retired.

CHESAPEAKE & OHIO—BALTIMORE & OHIO.—James E. Sell, B&O manager of passenger operations, appointed to a similar position on both C&O-B&O. Mr. Sell will have responsibility for control of passenger car equipment and train scheduling and work closely with maintenance of equipment personnel to provide improved passenger equipment and to reduce maintenance costs.

CHICAGO & NORTH WESTERN.—Clarence P. Nelson, general car foreman, Chicago Shops, retired March 31 after more than 48 years of service.

LEHIGH VALLEY.—James E. Musslewhite appointed assistant freight traffic manager—rates, New York, succeeding **William O. Peairs,** appointed director of market research, **Delaware & Hudson,** Albany (RA, April 5, p. 29). Mr. Musslewhite was formerly assistant freight traffic manager—rates and divisions, **New Haven,** at New Haven, Conn.

Clyde E. Pugh appointed district freight agent, Green Bay, Wis.

MILITARY TRAFFIC MANAGEMENT & TERMINAL SERVICE.—Activated on Feb. 15, MTMTS combines the Defense Traffic Management Service, the Army Terminal Commands, the Army and Navy common-user ocean terminals, the Air Traffic Coordinating Officers of the Army, Navy and Air Force, and other key traffic management functions formerly performed by the military services. **Maj. Gen. John J. Lane,** USA, is commander of MTMTS which was established to provide support to the Joint Chiefs of Staff, the military services, and the unified and specified commands. Headquarters are at Bailey's Crossroads, Va., near Washington.

Brig. Gen. Austin J. Montgomery, commands the Eastern Region at Brooklyn, N. Y.; **Capt. Grover F. Blankinship,** USN, commands the Central Region at St. Louis, Mo. and **Brig. Gen. Raymond C. Conroy,** USA, is commander of the Western Region at Oakland, Calif.

As Commander of MTMTS, General Lane also serves as executive director for military traffic, land transportation, and common-user ocean terminals. His deputy for operations is **Rear Admiral Emory D. Stanley,** USN. **Col. Edward A. Guilbert,** USAF, is acting deputy for administration. **Col. Richard K. Hutson,** USA, has been appointed chief of staff. The operational mission is to manage the utilization of commercial transportation for military cargo and personnel in the continental United States and to operate and manage all military ocean terminals except those used by the Navy in support of the fleet. Consolidation of traffic management under MTMTS is expected to simplify transportation procedures and effect savings in traffic management and terminal operations.

MISSOURI-KANSAS-TEXAS.—Charles T. Williams, president, retired April 7. The duties of president have been assumed by the chairman and chief executive officer, **John W. Barriger.**

MISSOURI PACIFIC. — Vaughn H. Livingston, general freight agent, appointed assistant freight traffic manager—rates, St. Louis.

NEW HAVEN.—J. C. Bonney, general freight agent, New Haven, Conn., appointed assistant freight traffic manager there, succeeding **J. E. Musslewhite,** who has been named assistant freight traffic manager—rates, **Lehigh Valley,** New York. **H. C. Bruning, C. J. Casey,** and **N. R. Coe,** assistant general freight agents, New Haven, promoted to general freight agents there. **W. J. West** appointed assistant general freight agent.

NORFOLK & WESTERN.—Fred T. Schmidt, assistant to manager transportation, St. Louis, retired March 31 after 47 years of service. **W. L. Robinson,** chief clerk to manager transportation, St. Louis, in addition to those duties, will assume the duties of assistant manager transportation.

George R. Janosko, general supervisor, Roadway Material Yard, Roanoke, Va., promoted to regional chief engineer, Lake Region, Cleveland, Ohio, succeeding **R. L. Mays,** appointed to the new position of engineer of planning—system, Roanoke. **B. H. Lester,** assistant superintendent, Norfolk Division, Crewe, Va., succeeds Mr. Janosko. **Frank W. Potter,** division engineer, Montpelier (Ohio) Division, promoted to engineer of track, Western Region, St. Louis, succeeding **William P. Beesley,** appointed division engineer, engineering and maintenance, Norfolk Division, Crewe.

At Roanoke—**Harry A. Shannon,** assistant engineer—buildings, promoted to engineer-

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buildings; **Henry E. Dearing,** assistant engineer—bridges, advanced to engineer of bridges; and **Harry W. Walbright,** crossing engineer, named public projects engineer and his former position abolished.

Richard P. Rouf, assistant master mechanic, Decatur, Ill., appointed master mechanic there, succeeding **A. C. Crawley,** retired.

M. D. Hill, assistant secretary, Cleveland, retired Feb. 28 after 48 years of railroad service.

Leon Atkinson, Jr., assistant manager transportation, Roanoke, appointed manager transportation, Lake Region, Cleveland, succeeding **Donald M. Bender,** appointed special transportation consultant, Lake Region. **John C. Liggan,** supervisor of transportation Roanoke, appointed assistant to manager transportation there.

Alfred W. Jenkins, personnel assistant, Cleveland, promoted to assistant manager personnel, Cleveland, succeeding **Edward J. Fisher,** who retired March 1 after 37 years of railway service.

PENNSYLVANIA.—J. D. Morris, director special services, Philadelphia, appointed assistant vice president—special services.

W. T. Hammond, engineer maintenance of way and structures—special duty, Philadelphia, appointed assistant chief engineer—staff, succeeding **C. J. Code,** retired.

SOUTHERN PACIFIC.—Robert L. King, assistant superintendent, Sacramento, Calif., appointed superintendent, Western Division, to succeed **D. R. Kirk,** named general manager, Texas and Louisiana Lines, Houston (RA, March 29, p. 87).

RAILROAD YARDMASTERS OF AMERICA.—Ralph H. Wachowiak, assistant to the president, elected president, to succeed the late **Milton G. Schoch** (RA, April 5, p. 30).

SOO LINE.—G. Allan MacNamara, chairman of the board, and **Edgar F. Zelle,** member of the board and of the board's executive committee, retired April 14. The position of chairman of the board will not be filled and **Leonard H. Murray,** president, will preside at future meetings of the board, of the executive committee, and of shareholders.

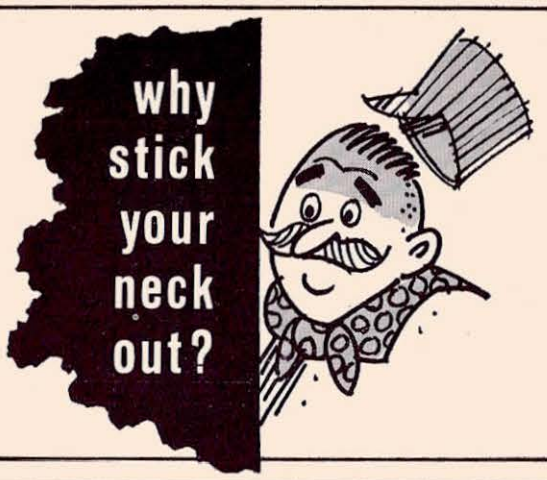
SOUTHERN PACIFIC PIPE LINES.—D. J. McGanney, president, retired March 31, after 54 years of service. Prior to his affiliation with the Pipe Line organization, Mr. McGanney was vice president, Executive Department, **Southern Pacific.**

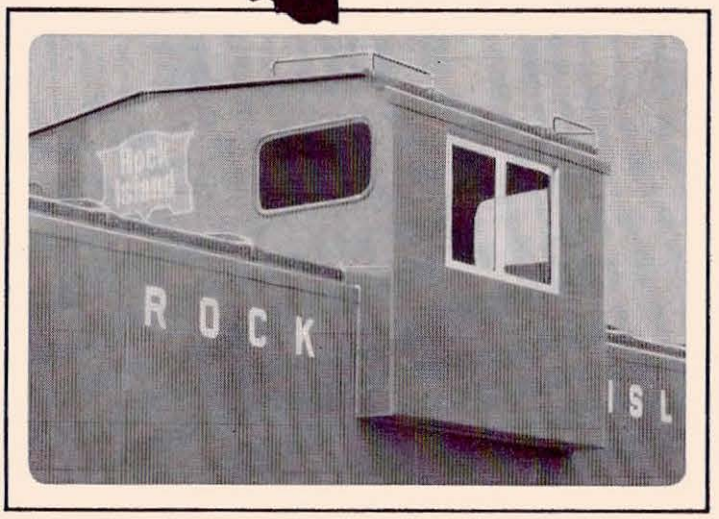
UNION PACIFIC.—A. O. Mercer, assistant general auditor, elected general auditor, Omaha, to succeed **E. M. Kerrigan,** retired (RA, April 5, p. 30).

Supply Trade

R. T. Gutz, executive vice president and chief operating officer, **True Temper Corp.,** Cleveland, Ohio, will become president on May 1, succeeding **Henry S. Woodbridge,** who will continue as chairman of the board. **W. E. Boyland,** vice president corporate planning, will assume the duties and title of vice president—finance, a position vacant during the past fiscal year. **L. A. Davis,** plant manager, Anderson, S.C., will become special assistant to the president at Cleveland.

William F. Tyler has been named director of customer services, **Tank Car Division, Union Tank Car Co.** He was formerly assistant director of tank car service.





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MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended April 10 were not available as this issue went to press.

PIGGYBACK CARLOADINGS.—U.S. piggyback loadings for the week ended April 3 totaled 20,730 cars, compared with 16,865 for the corresponding 1964 week. Loadings for 1965 up to April 3 totaled 259,164 cars, compared with 222,792 for the corresponding period of 1964.

PRR spending heavy for M/W

The Pennsylvania is making some heavy investments in some heavy equipment to take care of its nearly 10,000-mile system.

During the next three months the railroad plans to add six of the most advanced type of track maintenance machines to its work equipment fleet.

Chester J. Henry, PRR chief engineer, said that six ballast tampers have been bought from the Matisa Co., of Switzerland, for more than $500,000. The equipment was purchased under Pennsylvania's $44 million program to improve roadbed and operating facilities this year.

The 16-ton machines are self-propelled and are capable of resetting stone ballast beneath and around crossties to a depth 17 inches below top of rail at the rate of a quarter mile of main line track an hour. The Matisa tamper is also capable of combining work on track and through crossovers and switches.

The railroad has programmed $2.4 million for new cranes, brush cutters, spike pullers, track liners, saws, snow blowers, a rail welding plant and other modern maintenance equipment. As part of the extensive 1965 track improvement program, Pennsy will lay 30,000 tons of new rail on main line tracks and some 40,000 tons of reprocessed rail on secondary and yard tracks. ■

FREIGHT-TRAIN CARS

► *Baltimore & Ohio.*—Ordered 235 70-ton 60-ft box cars from the DuBois shops. Deliveries will begin in July.

► *Illinois Central.*—Ordered 107 70-ton, 60-ft box cars from Thrall Car at a cost of approximately $2 million for delivery beginning in April. IC also ordered 43 100-ton, 60-ft box cars from Thrall at an approximate cost of $810,000 for delivery during May.

► *Northern Pacific.*—Ordered 50 100-ton covered hopper cars from Pullman-Standard at a cost of approximately $790,000 for delivery during second quarter 1965.

► *Pennsylvania Power & Light.*—Ordered 136 100-ton open-top hopper cars from Bethlehem Steel at a cost of approximately $2 million. The cars, which will be used in unit-train service to move coal from western Pennsylvania mines to PP&L generating stations in eastern Pennsylvania, will be duplicates of 74 hoppers the utility put in service last year.

► *Santa Fe.*—Ordered 200 70-ton open-top hopper cars from Greenville Steel Car for delivery beginning in July. Santa Fe also ordered 33 86½-ft box cars from Greenville for delivery during second quarter 1965.

PIGGYBACK

► *XTRA.*—Ordered 1,600 low-alloy steel truck trailers, of which 1,350 will be completed by May 30. The remaining 250 units will be delivered later this year. The company is considering an additional order for 250 trailers. XTRA leases trailers on a per-diem basis for piggyback operations to Class I railroads of the U.S., Canada, and Mexico. The trailers will be built by Trailmobile Division of Pullman, Inc., Dorsey Trailers, Fruehauf Trailer Co., Enterprise-Black Diamond Trailer Co., Gindy Manufacturing Co., and Highway Trailer Co.

NEW FACILITIES

► *Great Northern.*—Ordered series overlay electronic tracks circuit equipment from General Railway Signal Co., to control release of electric switch locks in CTC territory in the state of Washington.

► *Philco Corp.*—Western Development Laboratories division has been awarded a $173,000 contract to develop and operate test data equipment for the San Francisco Bay Area Rapid Transit District test track at Concord, Calif. In addition to recording test cars' performance data, the exact positions of all cars on the test track will be recorded. Closed circuit TV will link station platforms with the control center.

CAPITAL EXPENDITURES

► *Canadian National.*—Capital budget for 1965 calls for outlays totaling $76.6 million for 4,800 units of rolling stock. No breakdown was given in the budget as tabled in the House of Commons.

► *Canadian Pacific.*—Capital-improvement program for 1965 includes $11.5 million for locomotives, $27.2 million for freight cars and $1.6 million for miscellaneous rolling stock.

YOU OUGHT TO KNOW

One call for train and plane: Great Northern and Western Airlines are making it easier for travelers in the West and Northwest to make their trip arrangements. It's now possible for a traveler to make air, rail or tour reservations with only one reservation call and to purchase a single ticket for the entire trip from one of three sources—a GN or Western Airlines ticket office or an authorized travel agent. GN and WA call the plan the first of its kind in the travel industry.

Troubled by overseas oil: Expressing disappointment over recent action by Interior Secretary Stewart Udall, the coal industry seems likely to turn to Congress to get residual oil import levels set. The coalmen, mine workers and the railroads have been asking for stabilized oil import levels to give Appalachian coal a better chance at Northeastern utility markets. Secretary Udall has increased oil import quotas by 75,000 barrels daily. Critics say the action will negate the effectiveness of some of the $1.1 billion in government aid intended to help Appalachia recover economically.

Power authority lets off steam: The Power Authority of New York State is fired up over the report released by the Corps of Engineers on the proposed Lake Erie-Ohio River Canal. The Authority says that during the three and a half years the study was being made it was never consulted about the project. It termed the situation "incredible." The Authority's hydro-electric power facilities at Niagara Falls and Massena, N. Y., depend on Great Lakes water. It's feared that a diversion of Lake Erie water would aggravate an already critical water shortage. The Board of Engineers for River and Harbors has granted a 90-day extension of hearing time on the Corps' canal plan at the request of opponents of the project.

Canadian L&D higher: Freight loss and damage claims, in Canada as in the U.S., continued to increase through 1964. The total dollar figure came to $8,304,485 last year against $7,827,193 in 1963. Excluding LCL, the 1964 total was $6,649,116 compared with $6,164,428 for the prior year. Important reductions in dollar totals showed up in canned foods, fabricated metal products, household appliances and forwarder traffic, but there were increases in nearly all other classifications.

The ladies, God bless 'em: Ladies love a bargain—and the Pennsylvania loves to fill its train on non-peak days. This combination of interests has in the past added as many as 3,000 passengers a week to Pennsy trains entering New York. This year the railroad is going after more of the same business. Effective April 21, the day the World's Fair reopens, PRR will offer special one-day fares between Washington and New York. Available only to women and girls, and good on Wednesdays and Thursdays, the special fare of $10.85 will be about half the regular round-trip coach fare.

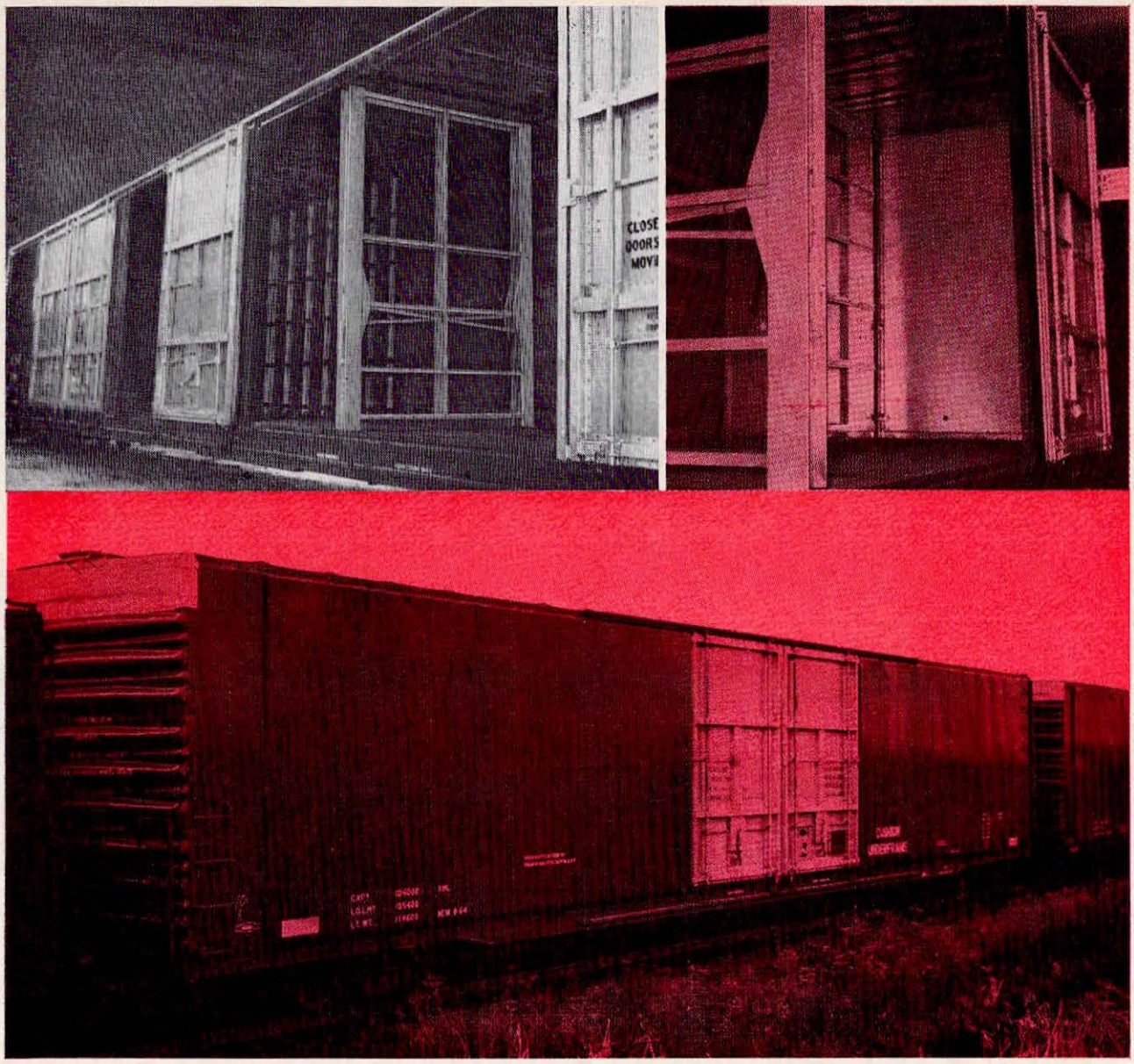
Business looking up Downeast: While some other New England railroads have fallen upon hard times, Maine Central has closed the books on a profitable '64 and looks forward to a good '65. In 1964 the road carried 200,000 more tons of freight than in the previous year, and in 604 fewer cars. Over the last two years, MC has spent $11 million for cars, many of them for the expanding pulp and paper industry, and for potato shipments.

Reading fights L&D: A stepped-up campaign against loss and damage is paying off for the Reading. In the first two months of this year, claims were down $23,500 (or 18.5%) from the comparable 1964 period. The campaign began last year, while Reading's L&D claims were spiraling toward a record $812,000. Since last November, L&D-prevention meetings have been held at 43 locations with some 1,000 operating and mechanical employees participating.

Truck tonnage: Intercity truck tonnage in the week ended April 3 was 3.5% above the volume for the previous week, and 11.5% ahead of the volume for the corresponding week of 1964, according to American Trucking Associations.

Current statistics

Net income	
12 mos., 1964	$699,000,000
12 mos., 1963	651,000,000
Carloadings, revenue freight	
14 wks., 1965	7,379,433
14 wks., 1964	7,228,368
Freight cars on order	
March 1, 1965	34,909
March 1, 1964	35,760
Freight cars delivered	
2 mos., 1965	12,721
2 mos., 1964	10,720
Serviceable cars	
March 1, 1965	1,406,712
March 1, 1964	1,411,426



There are 86½ feet between the Standard Dreadnaught Ends on the world's largest production line boxcar

It's 12' 9⅝" from the floor to the Standard Diagonal Panel Roof. Other Standard-built components are the coupler release rigging and the steel corner caps.

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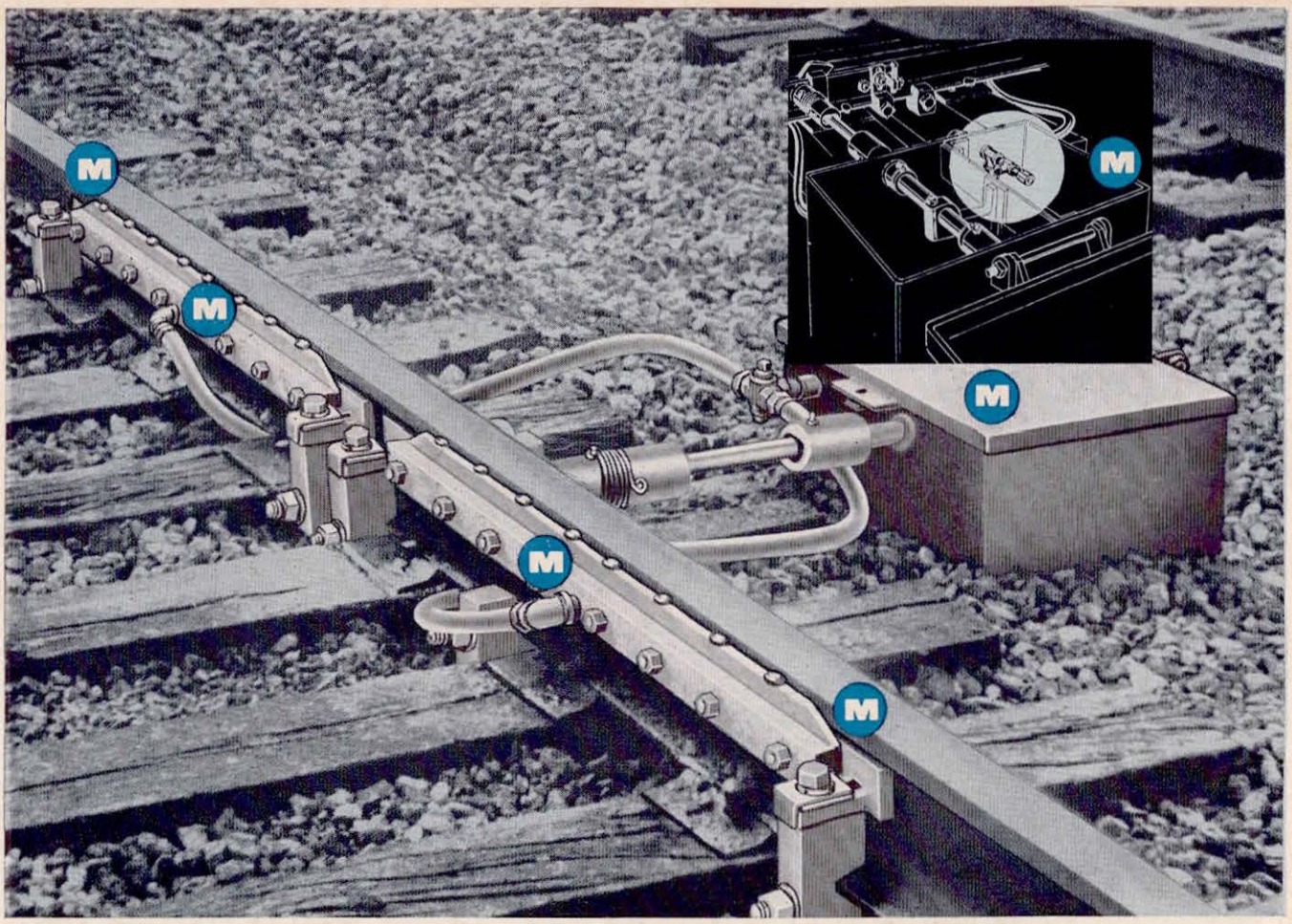

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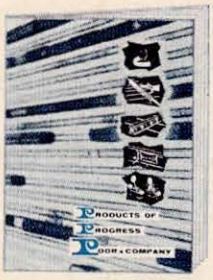

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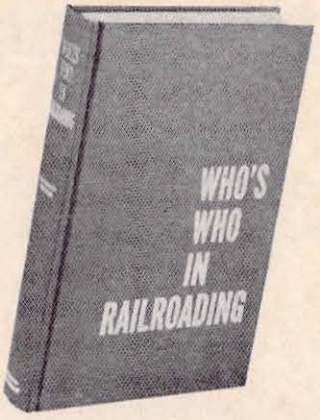

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Is wage boom everlasting?

Is it to employees' advantage for wages to increase 6% a year while investors get smaller return than 10 years ago?

Along with general increases in wages and fringe benefits, most railroad employees are now also enjoying a surcease from the protracted conflicts that have characterized union-management relationships for the past several years. But it would be self-deception for anyone to believe that all is serene; and that increases in wages and "benefits" can keep on recurring indefinitely, as they have been doing in all industries, and particularly the railroads, since the late 1930's.

The arithmetic of the situation is simple and irrefutable. As the railroads' chief negotiator, J. E. Wolfe, reported in his recent address at New Haven (RA, April 5, p. 11), annual earnings of railroad employees have increased 160% since World War II—which is twice the rise in the index of consumers' prices in the same period of time—which is another way of saying that the average employee on the payroll is now getting real wages (i.e., the things he can buy for the money he gets) that are double what he got at the end of World War II.

There is a lot of talk about the rising "productivity" of employees. From 1946 to 1964 the "traffic units" per railroad employee (i.e., the sum of revenue ton-miles and revenue passenger-miles, divided by the number of railroad employees) did increase by 112%—but employees' average annual earnings went up even faster (i.e., an increase of 130%). In other words, wages increased more rapidly than "productivity" did. And the wage figures do not include the pension and unemployment insurance taxes that railroads pay, nor supplementary "health and welfare" benefits.

These fringe payments by railroads rose by 109% in the 1954-64 decade alone. The average employee in 1964 cost railroads $3.83 per hour worked (in wages and benefits)—which was 63% more than in 1954. That is to say, that cost of labor to the railroads has been going up at an average rate of more than 6% a year.

When an employer is confronted with such increased costs as this, he naturally tries to pass them along—if he can—in higher prices to his customers. But railroads have not been able to do much in this direction, because of the pressure of competition from other forms of transportation. The 1964 revenue per freight ton-mile was only 30% higher than in 1946 and passenger fares were up only 60%. In the past ten years since 1954, average freight rates have actually been declining—not increasing; and it seems probable that the continuing decline in passenger traffic has resulted, among other reasons, because the fare per passenger-mile has increased by a higher ratio than has the expense of operating an automobile.

The principal factors in the production of railroad transportation are labor and capital (i.e., employees and investors). While employees' pay has been going up, up, up—what about the earnings of investors? The rate of return on investment in railroads was 3.13% in 1964—which is considerably less than the interest paid on deposits in most savings banks. This rate compares with 3.28% earned ten years ago, in 1954. To say it another way: In the 1954-64 period, while wages and benefits to employees were going up 63%, the earnings per $1 invested in the railroad business *decreased* almost 5%.

Investment is indispensable

It isn't a question of whether investors deserve more than they have been getting or that employees are getting more than they should. Instead, the question is whether investors are being paid enough to attract their money into the railroad business in sufficient quantity to keep railroads as up-to-date as their competitors are. Railroad managements are justly proud of the fact that they were able to find the money to make capital expenditures of $1.5 billion in 1964—the highest total on record. But was this enough to keep the railroads adequately up-to-date, compared with rival agencies of transportation?

While railroads were spending this $1.5 billion of investors' money to modernize their plant and equipment, government was spending ten times that sum for facilities for rival forms of transportation. The failure of railroad freight traffic to grow more rapidly than it has been doing, and the persistent decline in passenger traffic, indicate the kind of competition railroads (and railroad employees too) are up against.

To make railroad jobs secure and to provide the wherewithal for continued improvement in facilities, railroads need to offer rewards to investors which are comparable to those obtainable from investments in other industries. Some railroads are able to offer such rewards, but many of them are not. On the average, money invested in railroads pays the investor about half as much as his money would earn in the electric utility industry and about one-third as much as investments in manufacturing. This situation should be a matter of as much concern to railroad unionists, as to railroad managements.

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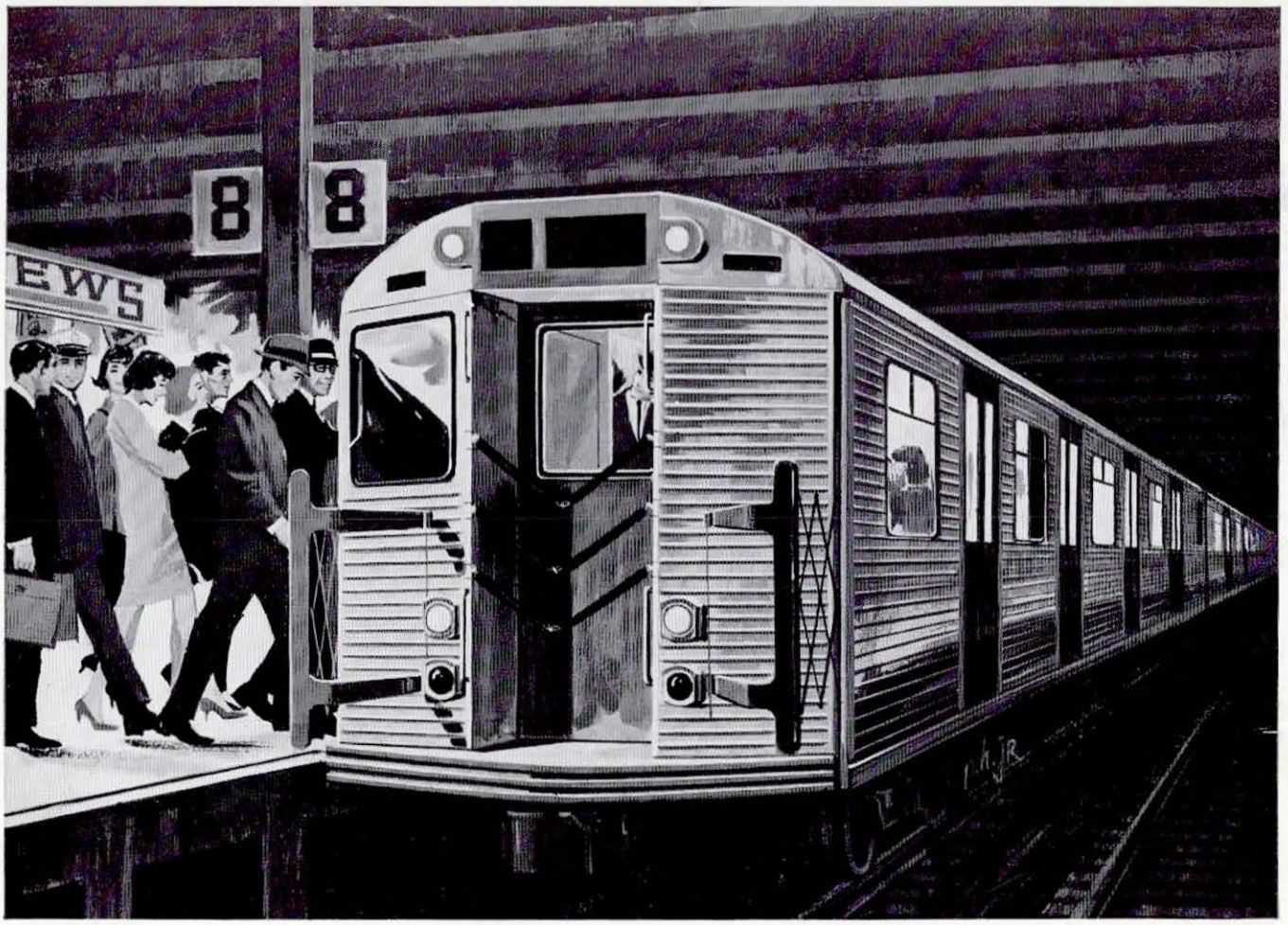

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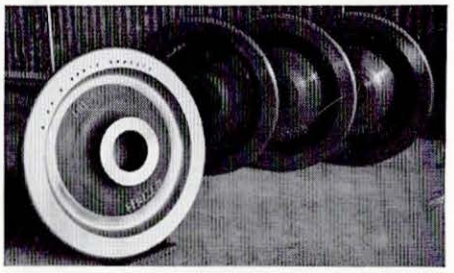

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